PROGRESS REPORT

OF

FOREST ADMINISTRATION

OF THE

PROVINCE OF ASSAM

FOR THE YEAR

1890-91.

By J. T. JELLICOE, Esq.,
OFFG. CONSERVATOR OF FORESTS, ASSAM.

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FROM

JAMES T. JELLICOE, Esq.,

Offg. Conservator of Forests, Assam,

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Shillong, the 8th July 1891.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for the year 1890-91.

I have the honour to be,

SIR,

Your most obedient Servant,

JAMES T. JELLICOE,

Offg. Conservator of Forests, Assam.

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By JAMES T. JELLICOE,

OFFG. CONSERVATOR OF FORESTS, ASSAM.

INTRODUCTION.

The general progress in forest work in Assam during 1890-91 is briefly summarised as follows:

2. The area of reserved forests added during the year under report was 129 square miles, besides which 7 square miles have been proposed under section 4 of the Forest Act, and are under settlement, and the selection of other areas was continued.

3. The maintenance of boundaries was carefully attended to and the greater portion was inspected by Divisional Forest Officers.

4. The survey of the Sâl forests by a party of the Imperial Forest Survey Branch was continued in the Goálpára district, and the demarcation of the classes of forests by the officer in charge of the Working Plans Division was proceeded with in the same district.

5. The number of prosecutions for breaches of forest rules shows a decrease of 48; the convictions came to 73·4 per cent. of the cases tried. The cases compounded also decreased.

6. The area under fire protection has been increased, and the results have been satisfactory. The season was on the whole favourable.

7. The Charduar Rubber-plantation was extended by 225 acres.

8. The financial results of the year show a surplus of Rs. 42,940 only, which is a very considerable decrease, as compared with last year's figures.

CHAPTER I.

AREA AND BOUNDARIES.

Area of reserved forests.

9. Under section 19 of the Indian Forest Act, the following three forest tracts were declared reserves during the year. No rights or privileges exist in them. Their boundaries have been recorded in the register of reserves, and copies of these entries are given in Appendix I.

Name of district.	Name of mauza or other subdivision.	Name of forest.	Area in acres.
Cachar	Bonraj	Addition to the Barak reserve.	3,840
Goálpára	Bijni duar	Second addition to the Bijni reserve.	22,540
Lakhimpur	Parapara	Dibru	56,189

10. No area was alienated from reserved forests, nor was any area excluded on account of rectification of boundaries.

11. Form No. 49 attached to this report shows in detail the areas of all reserves at the close of the year.

12. Proposals to reserve an additional area of 486 square miles of forest land were submitted to the Chief Commissioner during the year under report, and these are now under consideration. Selection of more forest tracts is in progress in the Gáro Hills, Goálpára, Kámrúp, Darrang, and Nowgong Divisions, and proposals to reserve them will be submitted in due course.

13. The map attached to this report shows the reserved forest areas in green and the protected forests in brown, as they were at the end of the year under report.

Area of proposed reserves under settlement.

14. The following statement shows the only forest tract proposed as reserve that remained under settlement at the close of the year :

No.	Name of forest.	Area in acres.	Name of district.	Year when proposed by Conservator.	Year when gazetted under section 4 of the Indian Forest Act.
1	Addition to the Suang reserve.	4,688	Nowgong ...	1888-89 ...	1888-89

Area of protected forests.

15. The area of protected forests has been increased by 2,644 acres, the Makum forest in the Lakhimpur Division having been declared a Government protected forest in notification No. 3143R., dated the 19th September 1890. In the same division an area of 13,037 acres has been taken from the Parapara protected forest into the Dibru reserve. The total area of protected forest is therefore 586,362 acres as shown in Form No. 49.

Area of unclassed forests and waste lands.

16. To the unclassed State forests and waste lands, as shown in Statement No. 49 of this report, 220 acres were added in the Cachar district, 190 acres in Sibságar, and 8,057) acres in Lakhimpur. They were parts of old tea grants relinquished by their owners. Of the 98,702 acres excluded from the unclassed State forests and waste lands, 69,532 acres were declared reserved and 2,644 acres protected forests, and the rest, *viz.*, 17,526 acres, was given up for cultivation.

Boundary work.

17. The clearing of boundary lines and repairing of boundary mounds received ther customary attention. Appendix II of this report shows in detail the work done in respect of maintaining a well recognizable boundary of all the State forests in Assam. Out of a total length of 1,141 miles of demarcated boundary, 1,066 miles were cleared, and 764 miles inspected by Divisional Officers. The increase in length of demarcated boundaries in the Goálpára and Lakhimpur Divisions is small, and is mainly due to the demarcation of new reserved and protected forests in the above districts.

Out of 4,981 boundary mounds, 4,901 were repaired, and their number was increased by 73, which was due to the demarcation of new reserves in the Goálpára and Lakhimpur Divisions and to the inclusion of 2 and 11 mounds in the Kámrúp and Khási and Jaintia Hills Divisions not shown in the previous year.

The inspection of boundaries by Divisional Officers was carried out as much as it could be done with due regard to their other important duties.

In the Goálpára, Kámrúp, Darrang, Nowgong and Gáro Hills Divisions much of the demarcation work is done by ryots, who receive, instead of payments in cash, free grants of forest produce from the reserves, and to this system is to be attributed the exceptionally low cost of demarcation work in those divisions. The increase in the cost of demarcation in the Kámrúp Division from Re. 0-11-9 per mile to Rs. 2-2-6 is due to certain forest tracts about to be proposed as reserves having been demarcated. In the Sibságar and Lakhimpur Divisions also the cost has increased from Rs. 3-0-4 to Rs. 3-11-6 per mile in the former and from Rs. 11-10-9 to Rs. 13-15-7 in the latter division, and this is entirely due to considerable repairs having been found necessary to old boundary mounds and the erection of a great number of new ones in some of the reserves.

18. The only boundary work done in the Sylhet Division was the clearing of the northern boundary of the Langai and Singla reserve, the cost of which was debited to the Survey Department in accordance with the orders of the Chief Commissioner.

The average cost of demarcation per mile was Rs. 3-9-11, as compared with Rs. 3-14-5 in the previous year.

CHAPTER II.

SURVEYS, WORKING PLANS, AND PLANS OF OPERATIONS.

Survey.

19. The survey of the Sâl forests in the Goálpára district was continued by the Imperial Forest Survey Branch, and the services of Mr. J. C. Kelly, Sub-Assistant Conservator, were again transferred for this work from the latter end of November 1890 to the middle of June 1891. No survey work was done in any other division.

Working Plans.

20. From the middle of September to the end of April the officer in charge of the Working Plans Division was engaged with his subordinates in marking out classes of forests similar to those marked last year in the Sâl forests of the Goálpára district. Work was started early in the season, because it was supposed that the survey party would commence plane-tabling on the 1st November. Actually, none of this work was done till February.

21. Last year the work of dividing the forest into five sub-classes was done entirely by Mr. Fisher. This year he trained five of his subordinates to the work, and, after their training was completed, merely supervised their work, which considerably reduced the cost.

22. Nothing was done but the demarcation of compartment lines. The officer in charge of the survey party was written to from time to time to find out what area he expected to be able to complete during the year. It was not until late in April that he was able to give a definite answer. The season was then too far advanced, and the health of the establishment was too bad for enumeration or other work to be commenced.

23. The area completed was 422 square miles, in which 22,939 chains of compartment lines were demarcated and 387 boundary posts erected. In addition to this the compartment lines which were cut last year in the Ripu reserve and which were not surveyed were reopened. In this reserve 6,100 chains of line were demarcated, and 22 boundary posts were erected.

24. There was considerable sickness amongst all the establishments. Mr. Fisher suffered very much from fever, and was unable to work for five weeks in October and November. Two of the surveyors resigned on account of ill health.

25. The cost of marking lines was Rs. 5-12-11 per square mile, as compared with Rs. 50 per square mile last year. This is accounted for by the employment of native surveyors for marking class lines instead of the work being done by the Divisional Officer himself. The large area of lower hill forest, about 90 square miles, which is included in the total number of square miles completed, and in which no lines were cut, has had a considerable effect in reducing the cost per square mile.

Annual plans of operations.

26. Annual plans of operations were submitted by Divisional Forest Officers through Deputy Commissioners, and the instructions given by the Conservator were generally carried out.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

Establishments.

27. The permanently-sanctioned protective and office establishments remained the same as in the previous year. The continued increase of work in the forest, as well as in office, owing to increased areas of reserved forests, and to greater activity in the timber trade, necessitated the submission of proposals for strengthening the subordinate forest and office establishments, which are now under the consideration of the Government of India. On receipt of Government sanction to the revised scale, the greater portion of the temporary establishment now entertained will be absorbed in the permanent establishment.

General protection against breaches of forest law.

28. The tabular Statement No. 50 attached to this report shows in detail the number of prosecutions for breaches of forest rules. The total number of new cases taken to court was 115, against 163 cases of the previous year. Of these, and the 14 cases pending at the close of 1889-90, 83 resulted in convictions, and 30 in acquittals, leaving 16 cases undisposed of at the end of the year under report. An increase occurred in the Cachar, Nowgong, Lakhimpur, and Gáro Hills Divisions, while all the other divisions show a decrease.

29. 219 cases were compounded under section 67 of the Forest Act, which also shows a decrease of 68 cases, as compared with those compounded in 1889-90.

The cases compounded under section 67 of the Forest Act in each division during the year under report and the amount realised, as compared with the previous year, are given in the following statement :

Name of district.	Number of cases.		Number of persons.		Amount.	
	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.
					Rs.	*Rs.*
Cachar	23	16	25	17	164	216
Sylhet	65	24	65	53	155	185
Goálpárá	10	21	17	35	208	452
Kámrúp	3[illegible]	22	65	27	303	117
Darrang	7	5	7	5	31	16
Nowgong	51	18	55	22	252	97
Sibságar	20	76	20	89	66	339
Lakhimpur	27	5	33	5	976	50
Gáro Hills	43	32	48	43	192	498
Total	285	219	335	296	2,347	1,970

30. The average amount realised for each case compounded is Rs. 8-15-11, as compared with Rs. 8-3-9 of the year before.

Forest fires.

31. The area over which special measures were adopted, by isolation and the appointment of fire patrols, for the protection of the reserved and other State forests from fire was 730,549 acres, against 676,869 acres attempted in the dry season of 1890. Of this area, 685,196 acres were successfully protected, and 45,353 acres were failures.

32. The following table shows the percentage of failures, as compared with the areas attempted :

Name of division.	Percentage of failures to area attempted.							
	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Goálpára	64·32	2·51	·85	2·27	·63	6·89	56·67	10·16
Kámrúp	11·09	10·09	6·24	·18	·01	·76	3·73	·27
Darrang	·16	1·69	.....	.....	16·87	.....	16·50	2·80
Nowgong	·35	·17	3·08	·53	1·04	1·48	·70	·59
Khási Hills	·41	·63	.....	3·49	.....	3·58	18·89	.....
Gáro Hills	.....	.....	.....	.....	1·11	.....	·75	1·29

33. The following table will show the progress made and the failures which occurred in this work during the year in the different divisions :

Name of division.	Increase in expenditure as compared with previous year.	Decrease in expenditure as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.	Decrease in area actually protected in acres.
Goálpára	7,240	.....	11,616	201,560	.....
Kámrúp	766	.....	42,064	44,484	.....
Darrang	103	.....	.....	2,540	.....
Nowgong	.....	125	.....	100	.....
Khási and Jaintia Hills ...	.....	167	.....	865	.....
Gáro Hills	687	.....	.....	.....	461
Total	8,796	292	53,680	249,549	461

34. The results of this year's fire protection work have been exhibited in full detail in the tabular Statement No. 51 attached to this report. The fire records, showing the areas burned, and the tabular statements, showing the degree of damage done, are kept up properly in the Conservator's office and in the offices of the respective divisions.

35. The average cost per square mile of fire protection in the different divisions is given below :

Name of district.	Of area attempted.			Of area successfully protected.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*
Goálpára	17	8	4	19	7	11
Kámrúp	20	1	7	20	1	7
Darrang	14	3	10	14	12	0
Nowgong	6	15	0	6	15	10
Khási and Jaintia Hills	157	6	10	157	6	10
Gáro Hills	24	10	8	25	0	7

36. The exceptionally high cost of this work in the Khási Hills and the very low cost in Nowgong have been explained in paragraphs 55 and 56 of last year's report.

Account of fire protection according to divisions.—Goálpára Division.

37. The season in the Goálpára Division was exceptionally dry, and, in spite of all attempts made for their prevention, six fires occurred, a detailed account of which is given below.

38. Two fire guards negligently fired the outside grass jungle when the wind was blowing violently, and the fire entered the Sankos and Muktaigaon reserves, burning 32 square miles of grass land in the former and half a square mile of Sâl forest in the latter. The fire occurred on the 4th February 1891.

39. On the 4th February 1891, 30 acres of grass land were burnt in the Panbari-Pechadabri reserve and the culprit who had fired the forest about a mile off was caught and fined Rs. 16 under section 67 of the Forest Act, as the damage done was insignificant.

40. 16,640 acres, or 26 square miles, of pure grass land was burnt in the Bijni reserve. This fire came down from the Bhutan hills, and entered the reserve on the 8th February 1891.

41. In the Bhur reserve 1,300 acres, of which about 400 acres consisted of Sâl forest, were burned by a fire which entered the reserve on the 11th February 1891. This fire was also caused by the negligence of the forest guards, who burned the adjacent jungle during the day time in disobedience of orders.

42. On the 24th of March 1891 a fire occurred in the western Chirang reserve, by which 2½ square miles of forest were burned. After completion of the burning of one of the internal fire lines, the fire guards did not see any fire in old stumps of trees, but the head forest guard, having suspected that some of them might still be alight, sent eight men to inspect, who on arrival found the forest on fire.

43. Another fire occurred in the Bhumeswar Hill reserve on the 4th April 1891, by which 2,560 acres of the forest were burned. A man set fire to the rubbish in his field, but, owing to a strong wind blowing at the time, could not keep it under control, and the fire entered the reserve.

Kámrúp Division.

44. Attempts to protect all the reserved and protected forests in the Kámrúp Division were made during the year, as these forests are all very valuable. Only two fires occurred, one in Burduar and the other in the Gorubaldha reserve. Both the fires were caused by the negligence of fire guards, who were duly punished. The area attempted was 80,865 acres, against 72,801 of the previous year. Besides the above, the proposed Darunga reserve and four other unclassed State forests were also placed under fire protection, the area attempted and successfully protected being estimated at 34,000 acres.

Darrang Division.

45. Almost the whole fire protection in the Darrang Division was successful, since out of a total area of 18,542 acres attempted, 18,022 were successfully protected, 520 acres having been burned in the Balipara reserve. The fire originated inside the reserve, and the high wind blowing at the time favoured its spreading on both sides of the road leading to the Sâl forest. The speedy arrival of men, as well as the existence of a second fire line within the reserve, brought the fire entirely under control before it could do much damage.

Nowgong Division.

46. Fire protection work in the Nowgong Division extended to all the reserves, and was almost a complete success, an area of 500 acres only having been burned during the dry season.

Khási Hills Division.

47. The State forests in the Khási and Jaintia Hills were successfully protected during the year under report. The area attempted to be protected was the same as in the previous year, and there have been no failures. The total cost was Rs. 1,102.

48. All the reserves in the Gáro Hills Division were placed under fire protection. The external fire lines, as in the previous year, measured 153 miles in length, and were cleared to an average width of 300 feet. Out of a total area of 85,255 acres, only 1,103 were burned. There were altogether five fires, of which the one that occurred in the Rongrengiri reserve caused considerable damage, having burned 1,000 acres of the forest. It was caused by a Gáro, who neglected to extinguish the fire lit for cooking. The accused was tried by the Deputy Commissioner, and was convicted and sentenced to six months' rigorous imprisonment.

Gáro Hills Division.

49. The second fire, which burned 35 acres in the Dilma reserve was carried into the forest from an adjacent *jhúm*, but the culprits who lit the fire there escaped.

50. The fire in the Dhima reserve, which burned 30 acres, was caused by some wood-cutters, who could not control the fire they lit for cooking off account of a high wind prevailing at the time, which carried the fire into the reserve. The case was compounded, the accused having been fined Rs. 10 each.

51. The fire in the Jennari reserve entered the forest from a *jhúm* about half a mile off, and burned 25 acres before it was extinguished. This case was also compounded, and each of the accused was fined Rs. 10.

52. Ten acres of forest was burned in the Raja Simla reserve by a fire lit by a man who was fishing in an adjacent stream, which the fire crossed and entered the reserve. The offender was find Rs. 20 under section 67 of the Forest Act.

53. In the Angratoli reserve only 3 acres of forest was burned, and the cause could not be ascertained.

54. The help readily given by the Deputy Commissioner greatly contributed towards the preservation of the State forests in the Gáro Hills from fires which the Gáros so frequently and so carelessly kindle close to the reserves at a time when the winds blow so violently, and when everything is as dry as tinder.

55. The climate of Assam is so favourable to natural reproduction and the growth of trees in all forests, that the regeneration is all that could be desired. Sâl, the most valuable timber tree in Assam, reproduces itself naturally more than any other first-class tree. Attempts have been, and are, made to assist the spreading of Sâl by sowing seed on areas where it does not grow freely. Fire protection has been extended to all Sâl forests, and, as a natural consequence, the growth of young Sâl plants has increased considerably, and even if exploitation of this tree should continue with as much activity as has been the case during the last two years, the power of reproducing itself is so great that the removal of the parent trees will rather aid than retard the abundant growth of Sâl seedlings in the forests.

Natural reproduction.

56. In the mixed evergreen forests, the natural regeneration is also ensured by not allowing the felling of immature trees. With the increase in demand for other species of trees growing in these forests, fire protection will have to be extended to them to ensure the growth of young seedlings.

57. Full particulars of the plantation work done during the year under report have been given in Form No. 52 and Appendices III and IV.

Artificial reproduction.

58. No extension was made to the Kulsi plantation, but the areas already planted were maintained. The growth of the trees continues to be satisfactory. The addition of 1 acre to the caoutchouc and 3 acres to the teak plantation is the result of inclusion of fractional parts omitted by the Divisional Officer. Two acres under miscellaneous plantations, omitted in previous years' reports, have also been shown as "added during the year." The expenditure incurred on plantation work was Rs. 774.

Kámrúp Division.

59. In the Charduar Rubber plantation, an extension of 225 acres was made during the year under report, 50 acres of which had been planted up before the close of the year.

Darrang Division.

60. In Compartment No. 15, 99 acres, which had been prepared for planting in the previous year, were planted up, and similarly 304 acres were also planted up in Compartment No. 16. 1,277 vacancies were filled up by transplanting from the Charduar nursery. All existing lines were kept clear of jungle. 184 trees were broken by wild elephants and nine were washed away by the Mansiri river. Besides this, no other damage was done to the plantation. The timber trees planted amongst the rubber trees have also done well. The total expenditure on plantation work was Rs. 10,089, or Rs. 328 more than in the previous year.

61. The increase in expenditure is accounted for by the fact that 403 acres of previous year's extensions had to be planted up, and that an extension of 225 acres was made during the year under report, of which 50 acres were also planted up.

62. No protection from fire was considered necessary for the small Bamuni Hill Rubber plantation near Tezpur, there being no longer any undergrowth.

Nowgong Division.

63. The bamboos planted along the boundary of the Kholahat reserve are doing well.

Sibságar Division.

64. In the older plantations within the Nambor reserve vacancies were filled in where necessary, and weeding, pruning and climber cutting were carefully attended to throughout the year. The total area under plantation was 168 acres. The total expenditure incurred during the year amounted to Rs. 449, against Rs. 458 during the previous year.

Lakhimpur Division.

65. The experimental teak plantation extending over an area of 2 acres only made in 1869 near the old Makum fort required no further attention, as there was no undergrowth and the trees are large enough to protect themselves. The average height of the 20 dominant trees measured at the end of the year was about 68½ feet and the average girth 3¼ feet.

66. No expenditure was incurred on the Makai nursery, which it has now been decided to abandon, as the large tea garden which has been opened at Margherita has taken up all the labour. The Makai seedlings will be planted out in vacant spots in the forest as soon as they are large enough, and the nursery will be stocked with bamboos, for which there will always be a ready sale.

Gáro Hills Division.

67. The Sâl nurseries in the Dambu reserve have been a complete failure, caused by the density of shade overhead, which prevented the free admission of light and heat. The tarai bamboos (*Meloconna bambusoides*) overhanging these nurseries have been entirely removed in order to grow Sâl seedlings with better success hereafter. The total cost was Rs. 277.

Sowing and planting on *jhúmed* lands.

68. The efforts made to induce people to grow valuable trees on lands formerly *jhúmed* were continued with more or less success in the different divisions. The great aversion ryots have to this work has gradually been overcome and a gradual development of this system can now be hoped for.

Cachar Division.

69. In the Cachar Division 3 acres of land in the upper Jiri reserve were planted with Jarul seedlings, which are growing satisfactorily.

Sylhet Division.

70. Endeavours, as in the previous year, were made in the Sylhet Division, with a view to induce people to plant timber trees on old *jhúms* and cultivation was therefore permitted within the reserve. A nursery was made and 8 maunds of Jarul seed were sown there. When the plants are two years old, they will be put out in the *jhúms*.

Goálpára Division.

71. In the Sidli and Bengtol-Darogaon reserves about 109 acres were sown with Sâl. The Divisional Officer, Mr. Mein, inspected some of these lands and has reported that the attempts have partially succeeded.

Kámrúp Division.

72. An area of 47 acres of old *jhúm* was planted out with Teak seed received from Burma. The seed was put out at stake by the Gáros free of cost on condition of their receiving Rs. 2 per 100 plants alive at the end of two years. 14,100 spots were thus planted, but the seed did not germinate well, and the countings made at the close of the year under report showed only 889 plants alive. The Divisional Officer also inspected the area planted with Sâl in 1889-90 and the countings showed 4,840 seedlings in the 132 acres of old *jhúm*.

Nowgong Division.

73. Every endeavour was made to induce the Mikirs to sow Sâl seed on *jhúmed* lands in exchange for free cultivation within the reserves and for free grants of forest produce. The work will commence when the seed ripens.

Sibságar Division.

74. The Divisional Officer, Mr. Fordyce, has arranged to sow 5 acres of land in the Rengma Nága Hills with Ajhar seed at Re. 1 per acre for sowing, or Re. 1 for every 150 seedlings transplanted. The Mikirs will be supplied with the seed collected for the purpose by the Divisional Officer.

Gáro Hills Division.

75. An area of 6 acres had been *jhúmed* by Gáros in 1889-90 and sown with Sâl. On inspection the Divisional Officer found on an average 30 plants alive on each acre of land.

Improvement felling.

76. In the Goálpára and Kámrúp Divisions the removal of badly-shaped trees was continued, but timber traders in other divisions could not be induced to work out distorted trees. In Goálpára 473 and in Kámrúp 338 badly-shaped trees were sold.

Cutting of climbers.

77. The cutting of climbers in the Goálpára Division extended over an area of 4,309 acres at a total cost of Rs. 280-12, and in the Kámrúp Division this work was carried on in the Barduar, Pantan, Kulsi, Milmillia, and Chhoygaon reserves and extended over an area of 2,526 acres at a total cost

of Rs. 237. In the Nowgong Division this work was carried on in the Sonaikusi reserve, and t extended over an area of 8,000 acres.

Communications and buildings.

78. In Cachar, Sylhet, Goálpára, Sibságar, and Lakhimpur Divisions no new roads were made, but all the old ones were repaired.

Kámrúp Division.

79. In the Kámrúp Division a grant of Rs. 427 was made by the Local Board to open a new road from Gauháti to Pamohi in the Rani reserve. This road was traced and aligned and about half a mile of it completed before the close of the year. The Dhonipara and Bamanigaon roads, for the former of which a grant of Rs. 1,000 was received from the Local Board, were pushed on as much as funds admitted, and all other existing roads were repaired.

Darrang Division.

80. The road from Moranpukri to Rangapara, running through the Charduar plantation, was completed. All other existing roads were properly maintained.

Gáro Hills Division.

81. The Dambu-Damra road, which had been in charge of Messrs. M. C. Barua and Co., timber contractors, was taken over by this department and all necessary repairs were made at a total cost of Rs. 2,512. of which Rs. 1,500 was recovered from the contractors, leaving a balance of Rs. 1,012 still due.

82. The expenditure incurred on roadwork in each division is given below :

	Rs.	a.	p.
Direction Division	163	9	6
Cachar "	306	14	0
Goálpára "	18	7	10
Kámrúp "	1,084	4	3
Darrang "	1,354	13	7
Sibságar "	313	9	0
Lakhimpur "	130	3	0
Gáro "	114	2	0
Total	3,485	15	2

83. The building work done by the department consisted chiefly in repairs and improvements to old buildings, but new quarters for the forest ranger were commenced near the inspection bungalow at Margherita. The work was not completed before the year closed. Numerous temporary huts were erected in or near the forests for the use of the subordinates in the executive and protective establishments.

84. The total expenditure on building work was Rs. 8,051-15-7, as compared with Rs. 15,944-13-11 in the previous year. The expenditure incurred in each division was as follows :

	Rs.	a.	p.
Cachar Division	349	0	9
Sylhet "	191	0	0
Goálpára "	999	13	1
Kámrúp "	1,825	4	7
Darrang "	183	9	0
Nowgong "	392	0	0
Sibságar "	1,297	12	6
Lakhimpur "	1,067	0	7
Khási and Jaintia Hills Division	79	3	8
Gáro Hills "	1,667	3	5
Total	8,051	15	7

CHAPTER IV.

YIELD AND WORKING.

85. The total outturn of timber and other descriptions of wood and fuel from all Government forests during the year has been shown in tabular Statement No. 54, an abstract of which is given below for ready comparison :

Total outturn.

Class of forest.	1889-90.						1890-91.					
	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.
From reserved forests	1,058,422	30,518	1,946	17,147	311,276	1,419,309	866,493	118,872	452	26,518	451,776	1,164,112
" protected "	11,676	18,724	122	9,450	505,274	544,746	22,693	12	119	18,143	565,924	606,841
" unclassed "	1,224,718	31,782	3,181	135,452	1,658,439	3,053,572	909,038	26,947	111,052	127,745	1,608,973	2,783,755
Total	2,294,816	80,524	5,249	162,049	2,474,989	5,017,627	1,498,174	145,831	111,624	172,406	2,626,673	4,554,708

86. The following abstract statement is given in order to show the proportion in which this timber was worked out by direct Government agency by purchasers, and by ryots to whom free grants were made for home consumption :

Agency of exploitation.	1889-90.						1890-91.					
	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.
By Government agency	8,931	1,912	....	704	....	11,547	22,401	905	327	10,555	5,460	39,658
" purchasers	1,361,128	23,582	5,249	155,071	194,509	1,739,539	1,015,739	70,886	111,267	124,392	74,759	1,497,053
" free grants	924,757	55,030	....	6,274	2,280,480	3,266,541	460,034	74,040	....	37,459	2,446,454	3,017,997
Total	2,294,816	80,524	5,249	162,049	2,474,989	5,017,627	1,498,174	145,831	111,624	172,406	2,626,673	4,554,708

87. The above two statements show that the total outturn is 462,919 cubic feet less than in the previous year, the greater portion of which is due to a decrease in free grants of forest produce.

88. The outturn from reserved forests was 255,197 cubic feet less than in the previous year. This is due to an overstocked market, the unsettled state of the Lushai country and the terrible mortality from *kála-azár*.

89. The yield from protected forests increased by 62,095 cubic feet, as compared with that of the previous year, and it is accounted for by the fact that a large quantity of fuel was removed by ryots for home consumption from these forests in the Sylhet and Kámrúp districts.

90. The timber and other wood worked out from unclassed State forests is 269,817 cubic feet less than in the previous year and is due to the decrease in fuel removed free by ryots in the valley districts.

91. The timber and other wood yielded this year by the forests worked departmentally amounted to 39,658 cubic feet, or 28,111 more than last year. The produce removed by purchasers is 242,486 cubic feet less than the outturn of the previous year.

92. The outturn of timber from shared forests, as compared with the previous year, was as follows :

	1889-90.			1890-91.		
	Number of trees.	Pieces of dead wood.	Cubic feet.	Number of trees.	Pieces of dead wood.	Cubic feet.
From zemindári forests in the Gáro Hills.	601	.....	24,040	926	.....	37,040
From the forests in the Khási Hills.	412	1,789	34,370	396	2,102	36,860

An average of 40 cubic feet per tree and 10 cubic feet per piece of dead wood have been taken in calculating the above solid contents.

93. The above increase in the outturn of shared forests may be attributed to greater activity in the export timber trade from the Gáro Hills to Mymensing.

The outturn of forest produce from foreign and private forests is not registered in the Assam Valley districts.

94. The outturn of timber and fuel from Government forests in Cachar and Sylhet, inclusive of free grants, and that worked out from private or imported from foreign forests by purchasers, as compared with the previous year, in cubic feet is exhibited in the following statement:

Classes of forests.	1889-90.		1890-91.		Increase.		Decrease.	
	Timber.	Fuel.	Timber.	Fuel.	Timber.	Fuel.	Timber.	Fuel.
CACHAR.								
From Government forests.	381,718	64,190	219,890	68,183	.....	3,993	161,718	.....
" foreign forests ...	51,790	218	57,948	102	6,158	.....	.....	116
" private " ...	220,426	6,632	348,324	16,753	127,898	10,121	.....	.....
SYLHET.								
From Government forests.	68,909	697,490	85,733	764,248	16,824	66,758	.....	.....
" foreign forests ...	183,201	3,906	296,478	838	113,277	.....	.....	3,068
" private " ...	13,020	382	25,957	15,854	12,937	15,472	.....	.....

95. The percentage of the above produce worked out from each division is the following:

	From Government forests.	From foreign forests.	From private forests.
Cachar Division	40	9	51
Sylhet "	72	25	3

96. From the above statement it will be seen that the outturn of timber from Government forests in Cachar decreased by 161,828 cubic feet, which is due to the unsettled state of the Lushai country, which very seriously affected the removal of forest produce in general from the Government forests.

97. The free grant of fuel in the Cachar Division amounted to 60,480 cubic feet, as compared with 59,800 of the previous year, which, deducted from the total yield of fuel, *viz.*, 68,183, during the year under report, leaves 7,703, against 4,390 cubic feet removed by purchasers in the previous year.

98. The import of timber from foreign and private forests shows an increase of 6,158 and 127,898 cubic feet respectively. The former is unimportant and calls for no explanation; the latter is chiefly due to the fact that timber traders fell back on private forests owing to the strict enforcement of the system of marking trees before felling in Government forests. The revenue realized on timber imported from foreign forests in Cachar does not show a corresponding increase, as the logs removed were larger and mostly belonged to the third class.

99. In the Sylhet Division the exploitation from all classes of forests shows an increase except in fuel from foreign forests. The imports from Hill Tipperah increased largely, owing to the opening out of a number of small streams during the year under report, which greatly facilitated the removal of timber from that country. The traders also resort to these forests owing to the inducement of lower rates of royalty charged by the Mahárája.

THE WORKING OF THE FORESTS.

Departmental operations.

100. The timber and firewood yielded this year by the forests worked departmentally amounted to 39,658 cubic feet, as compared with 11,547 in the previous year. The increase is due to departmental operations carried on on a larger scale in the Goálpára and Kámrúp Divisions.

Explanations by divisions. Goálpára Division.

101. In the Goálpára Division the yield was 16,462, against 8,484 cubic feet of the previous year, which had all been sold in 1889-90. This ready sale induced the Conservator to extend the operations. Out of the total quantity brought to depôt by departmental agency, only 4,637 cubic feet were sold. This is apparently the result of a combination formed amongst timber-traders not to purchase the logs in the hope that the department might again revert to the *duffoddri* system. The Divisional Officer has been obliged to hold the timber over until a fair offer is made.

Kámrúp Division.

102. In this division there is an increase of 7,021 cubic feet. Departmental operations were extended in the Kámrúp Division in the hope that this would prove more remunerative than selling the trees standing in the forests. Most of the timber however remained unsold at the Kukurmara sale depôt, owing to an early fall in the Kulsi river, which rendered rafting impossible.

Darrang Division.

103. Nine hundred cubic feet of Sâl was worked out by the department from the Balipara Sâl forest for the purpose of constructing the Dhekrigaon bridge.

Sibságar Division.

104. An experiment was made to work out firewood by departmental agency, and 5,400 cubic feet of fuel was brought to the depôt, out of which 3,595 cubic feet was sold.

Gáro Hills Division.

105. In this division no direct departmental operations were carried out except the carting of sound sleepers from Dambu to Damra.

Experimental tapping of rubber trees.

106. The suppressed trees in compartments Nos. 1, 2, and 3 of the Charduar plantation were again tapped, and produced only 8 seers of rubber. This course was resorted to in order to kill the trees, as their growth was much stunted by their more vigorous neighbours.

Removal of produce by consumers or purchasers.

107. The abstract at the commencement of this chapter exhibits a decrease of 242,486 cubic feet of timber and fuel under this head, which is accounted for by the unsettled state of the Lushai country and the high mortality from *kála-azár* amongst timber cutters, who were unable for this reason to work out the timber which had previously been felled by them.

System of collecting revenue.

108. There has been no change in the two different systems of collecting revenue on forest produce removed from Government forests, which are—

(*a*) Collection of royalty, either wholly or in part, at the time the trees and other produce are sold, the balance due (if any) being collected at sale depôts before removal.

(*b*) Collection of royalty, according to quantity and quality at revenue stations.

The proposals submitted for a revision of rates of royalty have not met with the approval of the Chief Commissioner.

The timber trade.

109. Making a fair allowance for fluctuations in the timber trade, it may be safely said that this trade is improving, but its development as a matter of course will be gradual. The establishment of more saw mills will no doubt greatly increase the demand for second-class trees, generally used for tea boxes, and these can be supplied without any injury to the forests from a sylvicultural point of view.

110. Messrs M. C. Baruah and Co., who had a monopoly to work the Dambu forests in the Gáro Hills, failed during the year under report to comply with the terms of their agreement, and it was consequently cancelled.

111. In the Kámrúp Division *kála-azár* again interfered with the sale of Sâl trees a great number of which, felled in the previous year, had to be left lying in the forest owing to deaths among the timber cutters.

112. The working of the saw mills in the Lakhimpur and Darrang districts was satisfactory. In the latter division a new mill was opened by the enterprising Directors of the Sissi Saw Mill and Trading Company, Limited.

113. The number of trees sold under the timber concession granted to the Assam Railway and Trading Company, giving them the exclusive right to fell trees within 1½ mile on either side of the Makum branch line, was 202, of which 60 were first-class and 142 second-class trees, as compared with 993, of which 218 were first-class and 775 second-class trees in the previous year. The decrease in the second-class trees is due to this Company having practically ceased to cut tea boxes; the other mills in the district being able to supply better boxes at lower rates.

114. Under the head "Miscellaneous" in statement No. 54 and the abstract statements given at the commencement of this chapter, boats or dug-outs, oars, drift and waif wood, dead wood, domestic and agricultural implements, and other small pieces of wood, are included. The trade in the abovementioned descriptions of wood shows a decrease of 30,357 cubic feet, as compared with the previous year.

115. The trade in fuel is very unimportant, as the ryots enjoy the use of it free, and coal or coke, supplied at a comparatively cheap rate from the Makum coal fields, is almost exclusively used on tea-gardens in the Lakhimpur district. The fuel sold during the year under report was 19,700 cubic feet less than in the previous year.

116. The area of forest land allotted for cultivation, the amount of revenue realised and due on account of the trees valued on such land, and the average amount of forest revenue per acre are shown in the following statement:

Sale of trees on land allotted for cultivation.

Name of division.	Area of forest land allotted for cultivation in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1889-90.	1890-91.	Increase.	Decrease.	1889-90.	1890-91.	Increase.	Decrease.	1889-90.	1890-91.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cachar	1,903	2,657	754	....	3,197	5,379	2,182	....	1 12 4	2 1 11	0 5 7	.....
Sylhet	1,319	....	....	1,319	1,219	....	....	1,219	0 14 9	.....	.....	0 14 9
Darrang	302	533	131	....	546	112	....	434	2 11 3	0 5 4	.....	2 6 11
Nowgong	87	....	....	87	57	....	....	57	0 10 6	.....	.....	0 10 6
Sibságar	2,649	1,442	....	1,207	3,750	4,330	580	....	1 6 8	3 0 0	1 9 4	.....
Lakhimpur	622	166	....	456	439	1,018	579	....	0 11 3	6 2 1	5 6 10	.....
Total	6,882	4,678	865	3,069	9,208	10,839	3,341	1,710	1 6 0	2 6 9	1 0 9	.....

117. From the statement given above, it will be seen that the area of forest land allotted for cultivation decreased in all divisions except Cachar and Darrang, in the former of which there was a large number of valuation cases outstanding from previous years, which were all finished during the year under report. There has however been a decrease in the aggregate of 2,204 acres. The increase in revenue of Rs. 1,631 is explained by the fact that more revenue was realised in the Cachar Division, owing to several cases that remained outstanding having been settled during the year. The average amount of royalty realised per acre came to Rs. 2-6-9, as compared with Re. 1-6 of the previous year.

118. The total outturn of minor forest produce is exhibited in the tabular statement Form No. 55 attached to this report. The more important products included under this head are rubber, Agar, bamboos, thatching-grass and reeds, cane and *gurkati* permits in the Gáro Hills, and these will be noticed separately below.

Trade in minor forest produce.

It should however be mentioned that the revenue derived from grazing of cattle, chiefly buffaloes, during the year under report was Rs. 2,812, as compared with Rs 1,973 in the previous year.

119. The most valuable minor forest produce in Assam is rubber, from which a larger amount of revenue is usually realized than from any other kind. Proposals were submitted during the year under report to levy a duty of Rs. 12 per maund on all India-rubber produced in Assam or imported from beyond the frontier, which however did not meet with the approval of the Chief Commissioner.

The Cautchouc or Rubber trade.

120. Deducting imports from exports of rubber, the quantity presumably yielded by the trees in Government forests stands as 3,076 maunds, which is 343 maunds less than the yield in the previous year.

The outturn for the last ten years is quoted below for ready comparison:

Year.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Quantity in maunds ..	5,951	4,748	8,150	7,290	5,675	2,277	6,563	6,675	3,419	3,097

121. The value of the rubber *mahâls* in the Province was Rs. 10,755 less in the year under report than in 1889-90. This is due to the fact that no rubber *mahâls* were sold in the Lakhimpur division. The price offered was Rs. 20,000 for five years, which was considered too low. The following statement exhibits the value of these *mahâls* for the last ten years:

Name of division.	1881-82.	1882-83	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.
Cachar	1,150	3,000	2,000	1,700	1,000	500	275	.....	.....	.....
Sylhet	.....	.....	.....	.....	.....	250	500	.....	.....	.....
Goálpára..	150	200	.....	.....	.....	.....	.....	.....	.....	.....
Kámrúp	.....	1,610	905	.....	.....	.....	300	100	.....	.....
Darrang	6,951	21,100	22,100	22,100	22,100	22,100	21,005	21,005	21,005	21,005
Nowgong	765	182	295	280	128	88	96	.....	.....	.....
Lakhimpur	12,200	6,100	10,000	5,080	7,600	11,650	10,600	10,600	10,600	.....
Nága Hills	3,750	1,200	800	.....	.....	.....	.....	517	517	517
Khási „	.....	800	600	350	350	400	515	860	855	700
Total	25,046	33,992	36,700	29,510	31,178	34,988	33,264	33,082	32,977	22,222

122. The Agar *mahâl* in Sylhet was not leased, as there was no purchaser or it. The removal of this produce will for some years be stopped with a view to letting

the young Agar trees attain maturity. The value of the Cachar Agar *mahál* remained the same as in the previous year, the revenue realized being Rs. 1,000.

Total outturn in Bamboos.

123. The yield in bamboos is exhibited in the following table, as compared with that of the previous year:

	Number.		Value.	
	For trade.	Free grants.	For trade.	Free grants.
			Rs	*Rs.*
1889-90	2,080,168	2,171,785	5,911	9,509
1890-91	2,211,698	1,822,514	5,551	6,858
Increase or decrease.	+131,530	—349,271	—360	—2,651

124. The increase in the outturn of bamboos is accounted for by an increased demand in the Sylhet markets, which were supplied with bamboos removed not only from Government forests, but from foreign and private forests also, which explains the increase in the export trade of bamboos from those forests.

Total outturn in reeds and thatching grass.

125. Royalty on reeds and thatching-grass is only levied in the valley districts when they are exported beyond the Province or removed from the reserves. A tax is however collected on this produce in Sylhet and Cachar. The following table shows the total outturn of thatching grass and reeds during the year under report in the Sylhet and Cachar Divisions and at the Dhubri and Fakirganj revenue stations, as compared with the previous year:

THATCHING GRASS.

Year.	Dhubri and Fakirganj revenue stations.				Cachar.				Sylhet.			
	Number of cubic feet.		Value.		Number of cubic feet.		Value.		Number of cubic feet.		Value.	
	For trade.	Free grant.	For trade.	Free grant.	For trade	Free grant.	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.
			Rs.				Rs.	Rs.			Rs.	Rs.
1889-90	1,004,088	.....	2,510	.....	3,325	49,400	8	123	1,099,574	571,726	2,748	1,429
1890-91	2,495,593	.....	6,239	.....	31,200	12,000	77	30	581,150	560,600	1,455	1,401
Plus or *minus*..	+1,491,505	.....	+3,729	.....	+27,875	—37,400	+69	—93	—518,424	—11,126	—1,293	—28

REEDS.

Year.	Dhubri and Fakirganj revenue station.				Cachar.				Sylhet.			
	Number of cubic feet.		Value.		Number of cubic feet.		Value.		Number of cubic feet.		Value.	
	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.
			Rs.				Rs.	Rs.			Rs.	Rs.
1889-90	29,280	.....	915	.....	447	4,680	14	146	5,778	59,789	181	1,869
1890-91	32,632	.....	1,020	.....	768	2,198	24	69	9,104	57,518	285	1,797
Plus or *minus*..	+3,352	.....	+105	.....	+321	—2,482	+10	—77	+3,331	—2,271	+104	—72

Thatching-grass *mahále* are now leased in Sylhet at fixed annual rentals, and in such cases no record of the quantity removed is kept. This explains the decrease, and with the increase of the number of such annual leases, there will be a corresponding decrease in the quantity recorded. The value of these *mahále* increased from Rs. 897 realised in 1889-90 to Rs. 1,635 in the year under report.

The cane trade.

126. The value of the cane *mahále* remained the same as in the previous year, with the exception of *mahál* No 1 in the Lakhimpur Division, which was relinquished by the leaseholder.

The cane *mahále* were sold in 1888-89 for five years for an aggregate amount of Rs. 2,848, as reported in paragraph 152 of last year's report.

127. Royalty on canes removed from such forest tracts in the Assam Valley Districts as are not included in the *mahále* sold was separately collected, and those removed from the Cachar and Sylhet forests were charged for at the revenue stations. The following

statement shows all such cane and the value realized as well as cane granted free, as compared with the previous year:

Year.	In the Assam Valley Districts.				In Cachar and Sylhet.			
	Number of bundles.		Value.		Number of bundles.		Value.	
	For trade.	Free grants.	For trade.	Free grants.	For trade.	Free grants.	For trade.	Free grants.
			Rs.	Rs.			Rs.	Rs.
1889-90	138,042	51,221	1,053	380	24,426	24,857	1,527	1,554
1890-91	92,388	32,413	693	243	26,109	26,019	1,631	1,626
Plus or *minus*	—45,654	—18,808	—360	—137	+1,683	+1,162	+104	+72

The *gurkáti* permit system.

128. The *gurkáti* permit system remained unchanged. The fee charged for a foreign permit is Rs. 2 each and for a Gáro permit Re. 1. The following table exhibits the working of the system during the last nine years:

—	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Gáro permits ...	2,358	2,300	1,388	2,282	2,764	2,899	2,583	2,352	2,856
Foreign permits ...	1,223	2,210	2,073	3,870	4,147	5,893	6,575	7,572	9,778
Total	3,581	4,510	3,461	6,152	6,911	8,792	9,158	9,924	12,434
In Government forests..	3,043	4,029	2,886	5,284	5,678	6,120	6,460	6,351	7,975
„ zemindári forests ...	538	481	575	868	1,233	2,672	2,698	3,573	4,459
Total	3,581	4,510	3,461	6,152	6,911	8,792	9,158	9,924	12,434

129. The increase in both Gáro and foreign permits is ascribed partly to stricter supervision and partly to greater activity in the timber trade among Bengal traders, who find a ready sale for such produce. The number of *gurkáti* permits sold increased from 9,924 to 12,434, or 2,510 more than in 1889-90. Of this number, 1,624 were from Government and 886 from zemindári forests. The Divisional Officer attributes this increase both in Government and private forests to stricter control exercised over the removal of *gurkáti* produce.

Free grants of forest produce.

130. Timber and other forest produce granted free during the year under report is shown in the tabular statements Nos. 54 and 55 attached to this report, and also in the two abstract statements given at the commencement of this chapter.

131. In Cachar and Sylhet nothing was granted free from the reserves. There was a considerable increase under miscellaneous and fuel, the reason for which was explained in paragraph 161 of last year's report. In the valley districts less firewood was granted to ryots free of royalty, and this is owing to the fact that free grants were made only with a view to meet actual requirements, and strict control was exercised. No free grants were made to the Assam Railway and Trading Company, as their free concession terminated in February 1890.

132. Appendix V attached to this report exhibits separately the free grants made to rightholders under concessions of the Local Government and under executive orders.

Free forest produce required for home consumption purposes is usually granted from unclassed forests, but under special orders of the Chief Commissioner and in return for work done for the department such produce is frequently given from reserves.

133. The value of free grants in the several forest divisions during the year under report, as compared with the previous year, is given below:

	1889-90.	1890-91.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Cachar	1,770	1,581	.....	189
Sylhet	20,810	21,478	668	.....
Goálpára	7,075	15,217	8,142	.....
Kámrúp	10,282	7,582	.....	2,700
Darrang	15,005	14,764	.....	241
Nowgong	11,208	4,680	.....	6,528
Sibságar	30,265	28,899	.....	1,366
Lakhimpur	26,388	2,533	.....	23,855
Gáro Hills	.....	270	270	.....
Total	1,22,803	97,004	9,080	34,879

134. These figures are estimates only. In the Sylhet Division Rs. 668 worth of forest produce more than last year was taken by ryots for home consumption, and this is due to an increased demand for firewood. In all other divisions, except Goálpára and the Gáro Hills, the value of free grants made during the year under report decreased considerably, and this is entirely due to the fact that formerly mauzadárs granted free permits to ryots to the full extent of the different kinds of produce allowed by the rules, which practice has however been changed, and free permits are now issued with a limit to their actual requirements.

The increase in Goálpára has been chiefly in grants made under executive authority for work done, and in the Gáro Hills to a number of trees having been given for a new school house in Tura.

135. The boats or dugouts brought into the Lakhimpur district from beyond the Inner Line, and which under present rules pay no royalty, have been the following during the last six years :

1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
208	160	20	128	64	36

136. As heretofore, foreign timber and other forest produce was imported into the Province from Manipur, the Lushai country, Hill Tipperah, and Bhutan.

Imports and exports of forest produce.

The imports from Manipur and the Lushai country were as follows, as compared with the previous year :

	1889-90.		1890-91.	
	Number.	Cubic feet.	Number.	Cubic feet.
Logs	2,797	51,668	1,881	57,944
Poles	3	12	1	4
Posts and planks ...	28	110	.....	.....
Fuel	.....	218	.....	102
Bamboos	41,325	.....	60,350	.....
Canes (bundles)... ...	153	.....	451	.....

137. There was a decrease in the number of logs removed, but they were of larger dimensions, which accounts for the increase in their cubic contents. The small decrease in poles, posts, planks, and fuel calls for no explanation. The increase in bamboos and canes is due to a greater demand for them in the Sylhet markets.

The imports from Hill Tipperah were the following, as compared with the year before :

	1889-90.		1890-91.	
	Number.	Cubic feet.	Number.	Cubic feet.
Logs	9,898	182,609	13,084	295,595
Fuel	...	3,906	...	836
Bamboos	4,169,098	...	5,229,849	...
Canes (bundles) ...	20,495	...	20,674	...
Thatching grass and reeds ...	...	229,048	...	168,743

138. The increase in the most important articles of trade, *viz.*, logs, bamboos, and canes is chiefly due to greater facilities enjoyed by traders to work them out from Hill Tipperah. The forests are situated in convenient localities, and the rates of royalty were lowered in order to afford an additional inducement to the traders for working those forests. The forest areas in Sylhet are limited, and cannot supply all the requirements of the inhabitants of the district, which is another reason why the Tipperah forests are more resorted to.

139. The imports of dugouts from Bhutan slightly increased. No logs were brought down during the year under report. The following are the imports from Bhutan during the last nine years :

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Logs ...	168	80	29	.....	363	1,043	363	57	.....
Dugouts ...	230	146	30	63	303	684	303	222	315

140. The import of rubber during the last seven years into Assam has been the following :

District.	1884-85	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	Mds.	*Mds.*	*Mds.*	*Mds.*	*Mds.*	*Mds.*	*Mds.*
From Bhutan	20	31	37	50	590	44	29
„ Towang	134	175	267	126	53	.....	....
„ Dafla Hills ...	137	459	86	43	151	293	55
„ Nága, Mishmi, and Singpho Hills.	287	215	597	498	815	813	1,661
„ Lushai Hills ...	224	55	550	210	129	30	2
„ Manipur	.....	48	.....	.....	.....	.....	.....
„ Bengal by steamer ...	68	13	26	43	35	38	21
Total	870	996	1,623	970	1,773	1,218	1,678

141. It is very doubtful if the quantity of rubber imported into Assam, as exhibited above, is correctly represented by the figures received from the Government of Bengal, since the import of only 55 maunds from the Dafla Hills, which, as stated in paragraph 175 of last year's report, includes the Aka Hills, indicates that the *mahálldárs* did not register all they imported with the object, it is presumed, to keep it a secret. 1,661 maunds are shown as imported from the Nága, Mishmi, and Singpho Hills, but the officer in charge of the Lakhimpur Division, on information received from the Deputy Commissioner, has reported that 1,681 maunds and 27 seers of rubber were imported from the above countries, and of this quantity, a part is supposed to have been brought from Upper Burma with a view to avoid payment of the duty levied there.

142. The Agent and General Manager of the Assam Railway and Trading Company has kindly furnished the following figures showing the quantity of rubber railed along the Dibrugarh-Sadiya Railway during the year under report ; the figures of the previous two years are also given for ready comparison :

Month.	1888 89.		1889-90.		1890-91.	
	Mds.	*srs.*	*Mds.*	*srs.*	*Mds.*	*srs.*
April	569	9	407	10	313	10
May	1,057	2	200	20	66	20
June	131	4	106	20	70	20
July	21	15	5	20	142	10
August	45	34	8	30	6	30
September	5	2	2	20	.....	
October	.....		.....		.....	
November	4	10	5	30	17	10
December	13	0	6	10	4	20
January	11	10	11	0	8	38
February	48	30	50	20	109	14
March	237	11	111	0	188	10
Total	2,144	7	915	20	927	22

143. The quantity of rubber exported by steamer from Assam during the last seven years is as follows :

	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	Mds.	*Mds.*	*Mds.*	*Mds.*	*Mds.*	*Mds.*	*Mds.*
From Cachar	99	8	11	.....	163	24	20
„ Sylhet...	110	26	59	35	.....	.....	.....
„ Goálpára	588	728	297	221	593	298	158
„ Kámrúp	100	641	149	182	610	550	619
„ Darrang	2,717	1,440	1,375	493	1,212	753	788
„ Nowgong	963	1,510	323	554	470	41	50
„ Sibságar	200	741	197	1,658	708	877	900
„ Lakhimpur	2,752	1,429	1,463	4,115	4,472	2,094	2,309
Total	7,529	6,523	3,874	7,253	8,228	4,637	4,844

144. The decrease in export from Cachar and Sylhet is accounted for by the unsettled state of the Lushai country, which interfered with the collection of rubber. In the assam Valley districts the exports show an increase from each division

except Goálpára. The quantity exported from Lakhimpur by steamer as registered in Calcutta differs widely from the figures supplied to the Divisional Forest Officer by the steamer agent at Dibrugarh, both of which are given below for ready comparison :

Quantity registered in Calcutta.	Quantity reported by the steamer agent.	
Mds.	*Mds.*	*srs.*
2,309	3,292	28

The difference is due to a certain quantity of rubber being in transit when the year closed.

145. The imports and exports of forest produce of the Assam Valley districts are registered at Dhubri, and those of Cachar and Sylhet at Bhairab Bázár. The following statement shows the last year's operations :

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár. *			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	No.	.....	1,049	386,249	11	511	1,191	902	124
Caoutchouc	Mds.	.....	19	.....	4,824	.....	2	.....	20
Lac { Stick ...	"	.....	.....	124	9,213	.....	.....	.....	49
Lac { Shell ...	"	.....	.....	.....	.....	.....	.....	.....	.....
Lac-dye	"	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	No.	.....	.....	.....	.....	.....	.....	1,018,660	.....
Thatching grass ...	C.ft.	.....	.....	2,495,593	.....	.....	.....	.....	.....
Reeds	"	.....	.....	32,632	.....	.....	.....	.....	.....
Canes	Mds.	.....	5	9,185	482	.....	.....	4,809	.....

Changes in forest rules.

146. No additions to or changes in forest rules were made during the year under report.

CHAPTER V.

FINANCIAL RESULTS.

General.

147. The financial results shown in Form No. 58 give a surplus of Rs. 42,940, which is Rs. 79,429 less than last year, and is less than the average of the previous five years by Rs. 5,390, and this is partly due to loss in revenue on account of rubber and partly to a large increase in expenditure. The estimated value of free grants made during the year under report was Rs. 97,004, as compared with Rs. 1,22,803 of the year before, not Rs. 1,22,903 as erroneously entered in paragraph 188 of the report for that year.

148. The following table shows the receipts and expenditure with surplus and deficit during the last five years :

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue ...	1,96,657	2,12,011	2,67,312	3,03,882	3,79,498	3,26,793
Expenditure ...	2,11,494	2,12,287	2,26,892	2,09,905	2,57,129	2,83,853
Surplus ...	.....	.....	40,420	93,977	1,22,369	42,940
Deficit ...	14,837	276	.....	.....	.....	.....

149. The decrease in revenue during the year under report, as compared with that of the previous year, is entirely due to the following causes :

(*a*) Combination among the timber traders in the Goálpára Division, which resulted in leaving a large stock of timber on hand unsold at the close of the year.

(*b*) *Kála-azár*, a regular scourge in the Kámrúp Division, which caused terrible mortality among timber traders, compelling many to leave their work.

(*c*) Lushai scare amongst the *dufadárs*, who, being unable to sell their timber, could not purchase fresh trees.

(*d*) The rubber *mahál* in the Lakhimpur Division remaining unsold.

150. The forest revenue collected during the year under each of the main heads of service, as compared with the previous year, was as follows :

Revenue.

Revenue budget heads.	1889-90.	1890-91.	Increase.	Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency.	8,103 6 10	4,085 0 0	.....	4,018 6 10
II.—Timber and other produce removed from the forests by consumers and purchasers.	3,21,678 12 5	2,68,547 8 3	.....	53,131 4 2
III.—Drift and waifwood and confiscated forest produce.	2,510 13 8	2,422 4 11	.....	88 8 4
IV.—Revenue from forests not managed by Government.	15,830 15 6	12,206 12 3	.....	3,624 3 3
V.—Miscellaneous	31,373 10 4	39,531 9 4	8,157 15 0	.....
Total	3,79,497 10 4	3,26,793 2 9	8,157 15 0	60,862 6 7

151. The principal causes to which the falling off of the revenue under the first four main heads is attributable have been given in paragraph 149 of this report.

152. The large increase under V.—Miscellaneous is mainly due to a greater number of home consumption permits issued and to more revenue collected from passes on timber from Hill Tipperah in the Sylhet Division.

153. The forest expenditure during the year under report, as compared with that of the previous year, was as follows :

Expenditure.

Budget head.	1889-90.	1890-91.	Increase.	Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency.	4,318 8 2	8,052 8 10	3,734 0 8	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	10,951 15 8	13,341 5 10	2,389 6 2	.....
III.—Drift and waifwood and confiscated forest produce.	173 4 9	215 1 2	41 12 5	.....
IV.—Revenue from forests not managed by Government.	510 9 6	583 3 3	72 9 9	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government.	.....	.....	.....	.....
VI.—Live and dead stock	21,468 11 11	22,146 4 1	677 8 2	.....
VII.—Communications and buildings ...	20,540 5 5	11,717 8 2	.....	8,822 13 3
VIII.—Demarcation, improvement, and extension of forests.	59,316 2 9	74,801 5 8	15,485 2 11	.....
IX.—Miscellaneous	11,010 7 0	14,030 5 0	3,019 14 0	.....
Total of A.—Conservancy and Works ...	1,28,290 1 2	1,44,887 10 0	25,520 6 1	8,822 13 3
B.—Establishments.				
I.—Salaries	1,05,896 6 7	1,14,273 9 1	8,377 2 6	.....
II.—Travelling allowances	17,413 4 4	19,190 14 1	1,777 9 9	.....
III.—Contingencies	5,529 4 5	5,500 8 9	.....	28 11 8
Total B.—Establishments	1,28,838 15 4	1,38,964 15 11	10,154 12 3	28 11 8
Grand total of Expenditure	2,57,129 0 6	2,83,852 9 11	35,675 2 4	8,851 8 11

154. The increase in expenditure under A I.—Timber and other produce removed from the forests by Government agency is entirely due to timber and experimental cutch operations carried on in the Goálpára and Kámrúp Divisions.

The increase under A II.—Timber and other produce removed from the forests by consumers and purchasers is attributed chiefly to more commission paid to revenue collectors and to an increase in the cost of temporary establishment.

The increase under the next two heads of expenditure is small and calls for no remarks.

The increase under A VI.—Live and dead stock is explained by the fact that six elephants had to be purchased during the year under report at a total cost of Rs. 10,250, against Rs. 9,650 paid during 1889-90, and an additional outlay was also incurred for their feed and keep.

The increase under A VIII.—Demarcation, improvement, and extension of forests is due to survey operations carried on by the Imperial Survey Branch in the Sál forests of the Goálpára Division, as well as to extensions of the Charduar plantation amounting to 225 acres, and to better arrangements made in the Goálpára Division for the protection of the reserves from fire.

The increase under A IX.—Miscellaneous is chiefly accounted for by the refund of Rs. 8,000 to the Sissi Saw-mill and Trading Company, Limited; and also of Rs. 2,012-8, being the revenue deposited by some Marwari merchants on account of the Lakhimpur rubber *mahál*, the sale of which was disallowed, as the amount offered was too small.

The increase in expenditure under B I.—Salaries is partly due to the return of Mr. Fordyce from furlough, and partly to officiating allowances drawn by some of the officers.

155. The receipts and expenditure in the different divisions are given in the following statement for ready comparison :

Surplus and deficit according to divisions.

Name of division.	Receipts.			Expenditure.			Surplus.			Deficit.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Direction	242	0	0	29,768	6	1	.....			29,526	6	1
Working Plans ...	6	10	0	21,996	10	1	.....			21,990	0	1
Cachar	37,950	6	0	15,950	11	7	21,999	10	5	.....		
Sylhet	40,065	6	9	10,360	1	0	29,705	5	9	.....		
Goálpára	73,004	1	0	54,409	10	7	18,594	6	5	.....		
Kámrúp	54,066	4	10	36,350	0	0	17,716	4	10	.....		
Darrang	29,711	5	8	21,185	3	0	8,526	2	8	.....		
Nowgong	10,611	1	8	8,054	1	2	2,557	0	6	.....		
Sibságar and Nága Hills.	14,017	6	5	16,119	3	4	.....			2,101	12	11
Lakhimpur... ...	23,321	14	4	40,203	8	10	.....			16,881	10	6
Khási Hills ...	1,957	15	6	2,983	8	3	.....			1,025	8	9
Gáro „ ...	41,838	10	7	26,171	10	0	15,367	0	7	.....		
Total	3,26,793	2	9	2,83,852	9	11	1,14,465	15	2	71,525	6	4

In the Direction and Working Plans Division, the receipts are incidental and nearly the whole expenditure must therefore appear as deficit. Of the three other divisions where the expenditure exceeded the receipts, *viz.*, Sibságar, Lakhimpur, and Khási and Jaintia Hills, the last named district is decidedly poor, and eats up its revenue in the expenses incurred for fire protection and the establishment kept for general conservancy purposes.

In the Sibságar Division the deficit is due to the posting of a superior officer.

In the Lakhimpur Division there would not have been a deficit had the rubber *mahál* been sold during the year under report. The expenditure incurred on account of refunds, as stated above in paragraph 154, has also contributed to this deficit.

In the Cachar Division the surplus is Rs. 13,712 less than in the previous year. The long unsettled state of the Lushai country and the introduction and enforcement of the marking system caused a decrease in the total outturn of timber and other produce removed from Government forests and imported from foreign territories, and this in consequence resulted in a considerable falling off of revenue.

In the Sylhet Division the surplus is Rs. 10,223 more than in the previous year, whilst the expenditure decreased by Rs. 5,175.

In the Goálpára Division the surplus is less by Rs. 32,691, and there was also an increase in expenditure of Rs. 3,769, which is due to extended timber operations carried on by the department and the purchase of elephants during the year under report.

In the Kámrúp Division the receipts rose to Rs. 54,066, as compared with Rs. 52,530 collected in the previous year. The expenditure increased by Rs. 7,609, owing chiefly to departmental timber operations and other works of improvement carried on during the year under report.

In the Darrang division, the difference in surplus is slight and calls for no explanation. The Nowgong Division shows an increase in surplus of Rs. 1,794, which is accounted for by the fact that the Local Board purchased Sâl trees for the construction of bridges.

In the Khási Hills Division the receipts decreased by Rs. 571, and the expenditure was also less by Rs. 183.

In the Gáro Hills division the surplus increased by Rs. 3,759, whilst the expenditure was more by Rs. 2,003. The increase in receipts in the Gáro Hills Division is due to greater activity in trade in minor produce and the sale of departmental sleepers. The increase in expenditure is accounted for by the fact that a larger amount of commission was paid to pass sellers and better arrangements were made for the protection of all the Sâl forests in that division from fire.

156. The value of live and dead stock at the close of the year was Rs. 1,70,732, or Rs. 32,137 more than at the commencement.

Value of stock at the end of the year.

157. The outstanding revenue at the close of the year was Rs. 45,061, or Rs. 31,134 less than at the close of the previous year, as shown in Statement No. 60 attached to this report.

Outstanding revenue.

CHAPTER VI.

GENERAL REMARKS.

Establishments.

158. Mr. J. T. Jellicoe, Deputy Conservator, second grade, officiated in the first grade of Deputy Conservators during the whole year, excepting two months and a few days.

Mr. A. J. Mein, Deputy Conservator of Forests, second grade, was granted 40 days' privilege leave before the close of the year to recruit his health, which however so completely broke down that he was obliged to go home on furlough.

Mr. C. G. D. Fordyce, Deputy Conservator of Forests, fourth grade, returned from furlough in November 1890 and took charge of the Sibságar Division.

Mr. T. J. Campbell, Assistant Conservator of Forests, first grade, had furlough granted him for one year with effect from 19th November 1890, after making over charge of the Gáro Hills Division to Babu Jogesvar Sur, Sub-Assistant Conservator of Forests, who remained in charge until the year closed.

Mr. C. P. Fisher was promoted to officiate in the first grade of Assistant Conservators with effect from 7th June 1890; he was on privilege leave from 28th June to 27th September 1890.

Mr. W. F. Lloyd, Assistant Conservator, third grade, joined this department on transfer from the Central Provinces on 26th April 1890 and was promoted to the second grade of Assistant Conservators with effect from 17th November 1890 on passing in Assamese by the lower standard.

The services of Mr. J. C. Kelly, Sub-Assistant Conservator, were temporarily transferred to the Imperial Forest Survey Branch from 27th November 1890 until the close of the year. He was on privilege leave from 16th June until 11th August 1890.

Babu Nil Kanta Mukherji, Forest Ranger, who successfully passed the final examination at the Forest School at Dehra Dun, returned during the year under report and was posted to the Lakhimpur Division.

Conservator's Tour.

159. The Conservator, Mr. Mann, left head-quarters on the 13th November 1890, and returned on 3rd March 1891.

The number of days spent in the different divisions was as follows:

	Days.
Kámrúp	15
Goálpára	29
Gáro Hills	8
Darrang	13
Lakhimpur	17
Sibságar	18
Total	100

Services of Officers.

160. Mr. Gustav Mann, the late Conservator of Forests, was in charge of the Department throughout the year until he was relieved of his duties by the writer of this report, and retired from service on the 1st of May 1891.

Mr. J. T. Jellicoe held charge of the Lakhimpur Division during the whole year; he travelled for 192 days.

Mr. A. J. Mein was in charge of the Goálpára Division from the commencement of the year until he went on privilege leave on the afternoon of the 3rd March 1891. He travelled 113 days.

Mr. C. G. D. Fordyce held charge of the Sibságar Division from 24th November 1890 till the close of the year; he travelled 85 days.

Mr. D. P. Copeland was in charge of the Kámrúp Division throughout the year; he travelled 166 days.

Mr. T. J. Campbell held charge of the Gáro Hills Division from the beginning of the year until 19th November 1890; he travelled 121 days.

Mr. H. G. Young was in charge of the Cachar Division from the commencement of the year until 2nd March 1891; he also held charge of the Sylhet Division, in addition to his own duties, for three months from 5th July to 4th October 1890 and travelled 113 days.

Mr. C. P. Fisher was in charge of the Working Plans Division from the commencement of the year until 28th June and again from 28th September until the close of year; he was also in charge of the Goalpára Division from 3rd March to 13th April and from 3rd to 11th May 1891 and travelled 219 days.

Mr. W. F. Lloyd remained attached to the Kámrúp Division from 8th May to the end of June 1890; he then held charge of the Sibságar Division from 1st August until 24th November and of the Darrang Division from 27th November until the close of the year. Mr. Lloyd also held charge of the Nowgong Division, in addition to his own duties, from 1st December to the end of the year; he travelled 106 days.

Mr. J. C. Kelly held charge of the Darrang Division from 11th August until 27th November 1890; he travelled 117 days.

Babu Jogeswar Sur was in charge of the Nowgong Division from the beginning of the year until 11th November; he then held charge of the Gáro Hills Division from 20th November until the close of the year; he was also in charge of the Darrang Division from 1st April to 10th August 1890 in addition to his own duties. He travelled 118 days in the Gáro Hills and 145 days in the Nowgong Division.

Babu Tara Kishor Gupta held charge of the Sylhet Division throughout the year, except three months, from 5th July to 4th October 1890, when he was on privilege leave; he travelled 103 days.

Babu Sri Gopal Banerji, Forest Ranger, was in charge of the Sibságar Division from the commencement of the year until the end of July 1890 and travelled 94 days.

FORM No. 49.

FOREST DEPARTMENT, ASSAM.—AREA OF RESERVED FORESTS, PROTECTED FORESTS AND UNCLASSED STATE FORESTS AND WASTE LANDS, 1890-91.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
			(a) Reserved Forests.							
Cachar ...	Sonai	Cachar district ...	Upper Jiri	15,360	24	.....	.....	15,360	24	
" ...	"	" " ...	Lower "	9,002	14	.....	.....	9,002	14	
" ...	"	" " ...	Barak "	42,880	67	3,840	.....	46,720	73	No. 2737R., dated the 18th August 1890.
" ...	"	" " ...	Sonai "	11,520	18	.....	.....	11,520	18	
" ...	Ditto and Matijuri ...	" " ...	Inner Line	325,760	509	.....	.....	325,760	509	
" ...	Matijuri	" " ...	Katakhal	51,200	80	.....	.....	51,200	80	
" ...	"	" " ...	Dhaleswari	20,451	32	.....	.....	20,451	32	
			Total	476,173	744	3,840	.....	480,013	750	
Sylhet ...	Patharkandi ...	Sylhet district ...	Langai and Singla	108,800	170	.....	.....	108,800	170	
			Total	108,800	170	.....	.....	108,800	170	
Goálpára ...	Eastern	Goálpára district ...	Bijni Duár	77,440	121	22,540	.....	99,980	156	No. 2736R., dated the 18th August 1890.
" ...	"	" " ...	Sidli	43,757	68	.....	.....	43,757	68	
" ...	"	" " ...	Bengtol and Darogaon ...	7,470	12	.....	.....	7,470	12	
" ...	"	" " ...	Bhumeswar Hills	4,033	6	.....	.....	4,033	6	
" ...	"	" " ...	Bhur	3,855	6	.....	.....	3,855	6	
" ...	Ditto and Western ...	" " ...	Chirang Duár No. I	69,203	108	.....	.....	69,203	108	
" ...	Western	" " ...	" " No. II	90,643	142	.....	.....	90,643	142	
" ...	"	" " ...	Ripu Duár	41,632	65	.....	.....	41,632	65	
" ...	"	" " ..	Jengasi Charaidaka	1,730	3	.....	.....	1,730	3	
" ...	"	" " ...	Atiabari	9,180	14	.....	.....	9,180	14	
" ...	"	" " ...	Panbari and Pechadaveri ...	3,290	5	.....	.....	3,290	5	
" ...	"	" " ...	Sankos	28,800	45	.....	.....	28,800	45	
" ...	"	" " ...	Muktaigaon	3,200	5	.....	.....	3,200	5	
" ...	Guma	" " ...	Guma	15,776	25	.....	.....	15,776	25	
			Total	4,00,009	625	22,540	.....	422,549	660	

FORM No. 49—*continued.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Kámrúp ...	Kulsi	Kámrúp district ...	Borduar	15,896	25	.....	.....	15,896	25	
" ...	"	" " ...	Pantan	21,910	34	.....	.....	21,910	34	
" ...	"	" " ...	Kulsi Plantation	3,680	6	.....	.....	3,680	6	
" ...	"	" " ...	Milmillia	3,610	6	.....	.....	3,610	6	
" ...	"	" " ...	Mayang	4,800	7	.....	.....	4,800	7	
" ...	"	" " ...	Chhaygaon	2,705	4	.....	.....	2,705	4	
" ...	Jirang	" " ...	Mataikhar	2,240	4	.....	.....	2,240	4	
" ...	Rani	" " ...	Jara	1,037	2	.....	.....	1,037	2	
" ...	"	" " ...	Rani	11,035	17	.....	.....	11,035	17	
" ...	"	" " ...	Kawasing	3,570	6	.....	.....	3,570	6	
" ...	Singra	" " ...	Simla Hills	317	.....	.....	.....	317	.....	
" ...	"	" " ...	Dumpara	497	1	.....	.....	497	1	
" ...	"	" " ...	Khakei, Sikrabura Hill ...	2,530	4	.....	.....	2,530	4	
" ...	"	" " ...	Ghoraputa	120	.....	.....	.....	120	.....	
" ...	"	" " ...	Khatkhati Hills	644	1	.....	.....	644	1	
" ...	"	" " ...	Taraibari	806	1	.....	.....	806	1	
" ...	"	" " ...	Garubaldha	240	.....	.....	.....	240	.....	
" ...	"	" " ...	Khurkhuri	149	.....	.....	.....	149	.....	
" ...	"	" " ...	Sursuria Hills	970	2	.....	.....	970	2	
" ...	"	" " ...	Gizang	930	1	.....	.....	930	1	
" ...	"	" " ...	Jaipur	774	1	.....	.....	774	1	
" ...	"	" " ...	Baradobha	1,190	2	.....	.....	1,190	2	
" ...	"	" " ...	Nampathar	640	1	.....	.....	640	1	
" ...	"	" " ...	Borjuli	1,120	2	.....	.....	1,120	2	
" ...	Northern	" " ...	Hajo	243	.....	.....	.....	243	.....	
			Total	81,653	128	.....	.....	81,653	128	
Darrang ...	Western	Darrang district ...	Khalingduar	13,212	21	.....	.....	13,212	21	
" ...	Central	" " ...	Balipara	56,224	88	.....	.....	56,224	88	
" ...	"	" " ...	Charduar	66,983	105	.....	.....	66,983	105	
" ...	"	" " ...	Bhamaraguri	386	1	.....	.....	386	1	
" ...	"	" " ...	Garumari	205	.....	.....	.....	205	.....	
" ...	"	" " ...	Singri Hill	1,200	2	.....	.....	1,200		

...	Eastern ...	" " ...	Nowduár	52 480	82	.....	.....	52,480	82	
			Total	190,690	298	.....	.....	190,690	298	
Nowgong ...	Western	Nowgong district ...	Kholahat	16,848	26	.....	.....	16,848	26	
" ...	"	" " ...	Rongkhong	6 339	10	.....	.....	6,339	10	
" ...	"	" " ...	Sonaikusi	10,754	17	.....	.....	10,754	17	
" ...	Eastern	" " ...	Doboka	29,014	45	.....	.....	29,014	45	
" ...	"	" " ...	Diju	5,742	9	.....	.....	5,742	9	
" ...	"	" " ...	Suang	1,924	3	.....	.....	1,924	3	
" ...	"	" " ...	Bamuni	449	1	.....	.....	449	1	
" ...	"	" " ...	Jungthung	8,047	13	.....	.....	8,047	13	
" ...	"	" " ...	Sildharampur	4,191	7	.....	.....	4,191	7	
" ...	"	" " ...	Kukrakata Hill	3,936	6	.....	.....	3,936	6	
			Total	87,244	136	.....	.....	87,244	136	
Sibságar ...	Sibságar	Sibságar district ...	Diroi	11,733	18	.....	.....	11,733	18	
" ...	"	" " ...	Abhoipur	16,281	25	.....	.....	16,281	25	
" ...	"	" " ...	Sola	1,778	3	.....	.....	1,778	3	
" ...	Jorhát	" " ...	Holangapar	4,912	8	.....	.....	4,912	8	
" ...	"	" " ...	Dessi	6,912	11	.....	.....	6,912	11	
" ...	Golághát	Nága Hills district ...	Nambor	249,312	390	.....	.....	249,312	390	
" ...	"	" " ...	Mikir Hills	51,840	81	.....	.....	51,840	81	
" ...	"	" " ...	Upper Daigurung	5,312	8	.....	.....	5,312	8	
" ...	"	" " ...	Lower "	5,120	8	.....	.....	5,120	8	
" ...	"	" " ...	Kalioni	51,840	81	.....	.....	51,840	81	
" ...	"	" " ...	Diphu	42,080	66	.....	.....	42,080	66	
" ...	"	" " ...	Rengma	34,400	54	.....	.....	34,400	54	
" ...	"	" " ...	Doyong	60,875	95	.....	.....	60,875	95	
			Total	542,395	847	.....	.....	542,395	847	
Lakhimpur ...	Dibrugarh	Lakhimpur district ...	Dehingmukh	13,747	21	.....	.....	13,747	21	
" ...	"	" " ...	Jokai	11,858	19	.....	.....	11,858	19	
" ...	"	" " ...	Dibru	.....	.....	56,189	.....	56,189	88	No. 1790R., dated the 4th June 1890.
" ...	North Lakhimpur ...	" " ...	Bhorolowah	5,280	8	.....	.....	5,280	8	
" ...	" ...	" " ...	Kuddum	13,626	21	.....	.....	13,626	21	
" ...	Makum	" " ...	Upper Dehing	148,691	232	.....	.....	148,691	232	
" ...	"	" " ...	Jaipur	24,985	39	.....	.....	24,985	39	
			Total	218,187	341	56,189	.....	274,376	429	
Khási and Jaintia Hills.	Jowai	Khási and Jaintia Hills district.	Saipung	32,000	50	.....	.....	32,000	50	
			Total	32,000	50	.....	.....	32,000	50	
Gáro Hills ...	Northern	Gáro Hills district ...	Jinari	6,640	10	.....	.....	6,640	10	
" ...	"	" " ...	Chima and Bangshi	8,680	14	.....	.....	8,680	14	
" ...	"	" " ...	Dhima	5,760	9	.....	.....	5,760	9	
" ...	"	" " ...	Dilma	1,120	2	.....	.....	1,120	2	
" ...	"	" " ...	Rajasimla...	4,800	7	.....	.....	4,800	7	
" ...	"	" " ...	Ildek	1,280	2	.....	.....	1,280	2	
" ...	"	" " ...	Darugiri	2,448	4	.....	.....	2,448	4	

FORM No. 49—*concluded.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Gáro Hills ...	Northern ...	Gáro Hills district ...	Rongrengiri	8,860	14	.....	.....	8,860	14	
" ...	" ...	" " ...	Dambu	4,364	7	.....	.....	4,364	7	
" ...	" ...	" " ...	Songsak	8,005	13	.....	.....	8,005	13	
" ...	Southern ...	" " ...	Emangiri	2,080	3	.....	.....	2,080	3	
" ...	" ...	" " ...	Rewak	1,280	2	.....	.....	1,280	2	
" ...	" ...	" " ...	Siju	1,280	2	.....	.....	1,280	2	
" ...	" ...	" " ...	Bagmara	12,320	19	.....	.....	12,320	19	
" ...	" ...	" " ...	Angratoli	9,138	14	.....	.....	9,138	14	
" ...	Western ...	" " ...	Dibru Hill	6,080	9	.....	.....	6,080	9	
" ...	" ...	" " ...	Bolsalgiri	640	1	.....	.....	640	1	
" ...	" ...	" " ...	Tura	480	1	.....	.....	480	1	
			Total	85,255	133	.....	.....	85,255	133	
			Total reserved forests ...	2,222,406	3,473	82,569	.....	2,304,975	3,602	
			(*b*) PROTECTED FORESTS. *North Cachar Hills.*							
Cachar ...	North Cachar ...	Cachar district ...	Kapili Diyang	191,200	299	.....	.....	191,200	299	
" ...	" ...	" " ...	Diyangmati	54,080	84	.....	.....	54,080	84	
" ...	" ...	" " ...	Mupa Mabur	20,960	33	.....	.....	20,960	33	
" ...	" ...	" " ...	Langteng Mupa	58,560	92	.....	.....	58,560	92	
			Total	324,800	508	.....	.....	324,800	508	
Sylhet ...	Patharkandi ...	Sylhet district ...	Raghunandan Hills	30,926	48	.....	.....	30,926	48	
" ...	" ...	" " ...	Tarap Hills	37,760	59	.....	.....	37,760	59	
" ...	" ...	" " ...	Putijuri Hills	40,960	64	.....	.....	40,960	64	
" ...	" ...	" " ...	Dinarpur	4,460	7	.....	.....	4,460	7	
" ...	" ...	" " ...	Patharia	30,663	48	.....	.....	30,663	48	
" ...	" ...	" " ...	Dewalia	5,780	9	.....	.....	5,780	9	
			Total	150,549	235	.....	.....	150,549	235	
Kámrúp ...	Singra ...	Kámrúp district ...	Jhari Khuri	1,235	2	.....	.....	1,235	2	
" ...	" ...	" " ...	Bura Gohain	620	1	.....	.....	620	1	
" ...	" ...	" " ...	Mogakhal	180	.....	.....	.....	180	.....	
			Total	2,035	3	.....	.....	2,035	3	

Sibságar ...	Sibságar	Sibságar district ...	Panidehingia	19,200	30	.....	.....	19,200	30	
			Total	19,200	30	.....	.....	19,200	30	
Lakhimpur ...	North Lakhimpur ...	Lakhimpur district ...	Kuddum	2,240	3	.....	.....	2,240	3	
" ...	Dibrugarh ...	" " ...	Parapara	26,720	42	.....	(b)13,037	13,683	21	
" ...	" ...	" " ...	Jokai	1,096	2	.....	.....	1,096	2	
" ...	Makum ...	" " ...	Solaguri	68,122	106	.....	.....	68,122	106	
" ...	" ...	" " ...	Upper Dehing	1,993	3	.....	.....	1,993	3	
" ...	" ...	" " ...	Makum	.....	.....	2,644	.....	2,644	4	No. 3143R., dated the 19th September 1890.
			Total	100,171	156	2,644	13,037	89,778	140	
			Total protected forests ...	596,755	932	2,644	13,037	586,362	916	
			(c) Unclassed State Forests and Waste Lands.							
Cachar ...	.....	Cachar district ...	Within revenue limits ...	34,354	54	(a)220	(e)8,347	26,227	41	
Sylhet ...	.....	Sylhet " ...	" " " ...	8,000	12	.....	.....	8,000	12	
Goálpára ...	.....	Goálpára " ...	" " " ...	33,383	52	.....	(b)22,540	10,843	17	
Kámrúp ...	.....	Kámrúp " ...	" " " ...	319,461	499	.....	.....	319,461	499	
Darrang ...	.....	Darrang " ...	" " " ...	115,710	181	.....	(c)333	115,377	180	
Nowgong ...	.....	Nowgong " ...	" " " ...	140,970	220	.....	.....	140,970	220	
Sibságar ...	.....	Sibságar " ...	" " " ...	224,954	352	(a)190	(c)1,442	223,702	350	
Lakhimpur ...	.....	Lakhimpur " ...	" " " ...	1,291,299	2,018	(a)8,057	(d)57,040	1,242,316	1,941	
Cachar ...	.....	Cachar " ...	Beyond " " ...	135,040	211	.....	.....	135,040	211	
Lakhimpur ...	.....	Lakhimpur " ...	" " " ...	929,920	1,453	.....	.....	929,920	1,453	
Nága Hills ...	.....	Nága Hills " ...	" " " ...	146,423	229	.....	.....	146,423	229	
Khási and Jaintia Hills.	.....	Khási and Jaintia Hills district.	" " " ...	64,000	100	.....	.....	64,000	100	
Gáro Hills ...	.....	Gáro Hills district ...	" " " ...	138,745	217	.....	.....	138,745	217	Forests and waste lands.
			Total unclassed forests and waste lands	3,582,259	5,597	8,467	89,702	3,501,024	5,470	
			Grand total	6,401,420	10,002	93,680	102,739	6,392,361	9,988	

(a) Grants relinquished.
(b) Declared reserve.
(c) Allotted for cultivation.

(d) 11,244 acres allotted for cultivation and 43,152 and 2,644 acres declared reserved and protected forest respectively.
(e) 3,840 acres declared reserve and 4,507 acres allotted for cultivation.

FORM No. 50.

FOREST DEPARTMENT, ASSAM.—REGISTER OF BREACHES OF FOREST RULES DURING 1890-91.

Forest division and civil district.	Cases pending from 1889-90.	New cases of the year.						Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.			Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
A.—CASES TAKEN INTO COURT.															
Cachar Division—Cachar district ..	....	....	1	....	2	3	3	2	3	1	1	3	4	....
Sylhet Division—Sylhet district ..		....	63	....	4	67	71	55	114	16	35	71	149	....
Goálpára Division—Goálpára district ..	....	....	2	....	....	2	2	1	7	1	2	2	9	....
Kámrúp Division—Kámrúp district ..	....	....	1	....	1	2	2	1	2	1	2	2	4	....
Darrang Division—Darrang district ..	....	....	4	....	....	4	4	2	2	....	....	2	2	2
Nowgong Division—Nowgong district ..	....	3	7	....	2	12	12	7	8	1	1	8	9	4
Sibságar Division—Sibságar district ..	10	....	12	....	3	15	25	7	60	8	11	15	71	10
Lakhimpur Division—Lakhimpur district ..	....	....	7	....	....	7	7	6	32	1	1	7	33	....
Gáro Hills Division—Gáro Hills district ..	....	1	1	....	1	3	3	2	2	1	3	3	5	....
Total	14	4	98	....	13	115	129	83	230	30	56	113	286	16
B.—CASES DISPOSED OF UNDER SECTION 67 OF THE INDIAN FOREST ACT, 1878.														
Cachar Division—Cachar district ..	....	....	8	....	9	17	17	16	17	1	1	17	18	....
Sylhet Division—Sylhet district ..	....	....	23	....	1	24	24	24	53	....	....	24	53	....
Goálpára Division—Goálpára district ..	....	8	6	2	5	21	21	21	35	....	....	21	35	....
Kámrúp Division—Kámrúp district	....	4	10	....	8	22	22	22	27	....	....	22	27	....
Darrang Division—Darrang district	....	....	5	....	....	5	5	5	5	....	....	5	5	....
Nowgong Division—Nowgong district ..	....	....	18	....	....	18	18	18	22	....	....	18	22	....
Sibságar Division—Sibságar district ..	....	....	76	....	....	76	76	76	89	....	....	76	89	....
Lakhimpur Division—Lakhimpur district ..	....	....	5	....	....	5	5	5	5	....	....	5	5	....
Gáro Hills Division—Gáro Hills district ..	....	1	31	....	....	32	32	32	43	....	....	32	43	....
Total..	....	13	182	2	23	220	220	219	296	1	1	220	297	....
C.—UNDETECTED CASES.														
				Nil.										
Grand Total A ..	14	4	98	....	13	115	129	83	230	30	56	113	286	16
Grand Total B ..	....	13	182	2	23	220	220	219	296	1	1	220	297	....
Grand Total C ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....

FORM No. 51.

Forest Department, Assam.—Area of Forest Tracts protected from Fire during the Dry Season 1891.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1890.	During dry season of 1891.			Cost during the season.
				Area attempted to be protected.	Failures.	Actually protected.	
	Goálpára District.		Acres.	Acres.	Acres.	Acres.	Rs.
Goálpára ...	Panbari Pochadaveri ...	1875-76	640	3,290	30	3,260	157
	Sidli	1876-77	32,579	43,757	.....	43,757	1,506
	Guma	"	8,550	15,776	.....	15,776	1,388
	Bongtol-Darogaon ...	1886-87	1,470	7,470	.....	7,470	207
	Bhumeswar Hill ...	"	4,000	4,033	2,560	1,473	315
	Maktaigaon	1887-88	2,240	3,200	320	2,880	84
	Bijni	1888-89	88,620	99,980	16,640	83,340	1,271
	Chirang	1889-90	34,540	1,59,846	1,600	1,58,246	2,910
	Bhur	"	3,500	3,855	1,300	2,555	286
	Jangasi-Charaidaka ...	"	1,280	1,730	.....	1,730	26
	Ripu	"	.....	41,632	.....	41,632	1,522
	Sankos	"	640	28,800	20,480	8,320	1,547
	Atiabari	"	.....	9,180	.....	9,180	344
	Total	.....	178,059	422,549	42,930	379,619	11,563
	Kámrup District.						
Kámrúp ...	Barduar	1873-74	14,400	15,896	200	15,696	648
	Pantan	"	19,765	21,910	.....	21,910	460
	Kulsi	"	2,360	3,680	.....	3,680	810
	Matnikhar	"	2,000	2,240	.....	2,240	145
	Jarasal	"	820	820	.....	820	92
	Milmillia	1874-75	2,500	3,610	.....	3,610	213
	Mayang Hill	1882-83	4,785	4,800	.....	4,800	43
	Rani { Myang Block ...	"	3,991	6,000	.....	6,000	265
	Rani { Mairakanda ...	"	3,800	4,400	.....	4,400	255
	Kawasing	"	3,260	3,260	.....	3,260	244
	Simla Hill	"	300	300	.....	300	6
	Dumpara	"	450	450	.....	450	6
	Khaksi Sikrabura ...	"	2,500	2,500	.....	2,500	8
	Ghorâputa	"	100	100	.....	100	3
	Khatkhati	"	640	640	.....	640	6
	Taraibari	"	640	700	.....	700	6
	Garubaldha	"	200	200	100	100	4
	Khurkhuri	"	140	140	.....	140	3
	Sursuria Hills	"	900	900	.....	900	6
	Gizang	"	.....	930	.....	930	19
	Jaipur	"	.....	774	.....	774	21
	Chhaygaon	1886-87	2,620	2,705	.....	2,705	83
	Baradobha	1889-90	1,000	1,000	.....	1,000	8
	Nampathar ...	"	400	400	.....	400	9
	Barjuli	"	1,000	1,000	.....	1,000	12
	Hajo	"	240	240	.....	240	50
	Jharikhuri	"	700	700	.....	700	3
	Buragohain	"	400	400	.....	400	1
	Mogakhal	"	170	170	.....	170	1
	Darunga proposed reserve...	1890-91	.....	32,000	.....	32,000	84
	Bogai, Bongaon, Boko, and Luki unclassed forests.	"	.....	2,000	.....	2,000	84
	Total	.....	70,081	114,865	300	114,565	3,598
	Darrang District.						
Darrang ...	Balipára	1873-74	4,570	4,570	520	4,050	325
	Garumari	1874-75	180	180	.....	180	61
	Chardnar	1878-79	892	892	.....	892	.....
	Bamani Hill plantation ...	"	8	8	.....	8	.....
	Khalingduar	1883-84	9,832	12,892	.....	12,892	27
	Total	.....	15,482	18,542	520	18,022	413

FORM No. 51,—*concluded.*

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1890	During dry season of 1891.			Cost during the season.
				Area attempted to be protected	Failures.	Actually protected.	
	NOWGONG DISTRICT.			Acres.		Acres.	Rs
Nowgong ...	Kholahat	1873-74	16,848	16,848	.....	16,848	181
	Doboka	"	28,630	28,640	500	28,140	260
	Diju	1879-80	5,742	5,742	.....	5,742	152
	Suang	1885-86	1,924	1,924	.....	1,924	44
	Bamuni	"	449	449	.....	449	40
	Sonaikusi	1888-89	9,410	10,000	.....	10,000	92
	Sildharampur	1889-90	3,457	3,457	.....	3,457	57
	Jungthung	"	8,000	8,000	.....	8,000	32
	Kukrakata	"	3,700	3,700	.....	3,700	18
	Rongkhong	"	6,000	6,000	.....	6,000	40
	Total	.....	84,160	84,760	500	84,260	916
	KHÁSI AND JAINTIA HILLS DISTRICT.						
Khási and Jaintia Hills.	Shillong	1874-75	2,755	3,618	.....	3,618	671
	Riatkhwan	1881-82	958	960	.....	960	431
	Total	.....	3,713	4,578	.....	4,578	1,102
	GÁRO HILLS DISTRICT.						
Gáro Hills ..	Dambu	1887-88	4,361	4,364	.....	4,364	379
	Darugiri	"	2,448	2,448	.....	2,448	150
	Dibru Hill	1889-90	6,043	6,080	.....	6,080	197
	Jinari	"	6,640	6,640	25	6,615	255
	Chima Bangshi ...	"	8,680	8,680	.....	8,680	541
	Dhima	"	5,760	5,760	30	5,730	255
	Dilma	"	1,120	1,120	35	1,085	117
	Rajasimla	"	4,800	4,800	10	4,790	174
	Ildek	"	1,280	1,280	.....	1,280	52
	Rongrengiri	"	8,860	8,860	1,000	7,860	406
	Songsak	"	7,405	8,005	.....	8,005	329
	Emangiri	"	2,080	2,080	.....	2,080	71
	Rewak	"	1,278	1,280	.....	1,280	55
	Siju	"	1,280	1,280	.....	1,280	48
	Bolsalgiri	"	640	640	.....	640	74
	Tura	"	480	480	.....	480	9
	Bagmara	"	12,320	12,320	.....	12,320	64
	Angratoli	"	9,138	9,138	3	9,135	104
	Total	.....	84,613	85,255	1,103	84,152	3,250
	Grand total	.....	436,108	730,549	45,353	685,196	20,872

FORM No. 52.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1890-91.

Division.	Name of plantation.	Area in acres. On 1st April 1890.	Added during the year.	Excluded during the year.	Area on 31st March 1891.	Receipts of the year.	Charges of the year.
Regular Plantations.	*Kulsi Plantation.*					Rs.	Rs.
Kámrúp ...	Caoutchouc	159	1	...	160	.....	280
	Teak	168	3	...	171	22	58
	Sisu	20	...	...	20	.....	43
	Khoir	12	...	...	12	.....	256
	Bamboo	2	...	...	2	.....	.....
	Miscellaneous	...	2	...	2	.....	97
	Total	361	6	...	367	22	774
Darrang ...	*Charduar Plantation.*						
	Caoutchouc	1,538	225	...	1,763	.....	10,089
	Bamuni Hill Plantation.						
	Caoutchouc	8	...	...	8	.....	.....
	Total	1,546	225	...	1,771	.....	10,089
	Total Regular Plantations ...	1,907	231	...	2,138	22	10,863
Cultural Operations.							
Cachar ...	Sowings on blanks in the upper Jiri reserve.	...	...	...	...	.....	7
Sylhet ...	Ditto ditto in the Langai and Singla reserve.	...	...	...	...	.....	2
Goálpára ...	Guma Bamboo plantation ...	...	...	...	...	.....	42
Darrang ..	Sowings on blanks in the Balipara reserve.	...	...	...	...	.....	35
Nowgong ...	Sowings on blanks in the Doboka reserve.	...	...	...	...	.....	37
Sibságar ...	Nambor timber plantation ...	168	...	...	168	.....	449
Lakhimpur ...	Makai nursery in the Makum forest.	...	...	...	...	.....	69
	Planting rubber trees along road to Margherita inspection bungalow.	...	...	...	...	.....	12
Khási and Jaintia Hills.	Sowings on blanks at Shillong..	...	...	...	...	.....	54
Gáro Hills ...	Cinchona nursery at Tura ...	...	...	...	...	.....	8
	Sál nursery in the Dambu reserve.	...	...	...	...	.....	277
	Total Cultural Operations ...	168	...	...	168	.....	992
	Grand total	2,075	231	...	2,306	22	11,855

FORM No. 54.

FOREST DEPARTMENT, ASSAM.—OUTTURN (IN CUBIC FEET SOLID) OF TIMBER AND FUEL DURING THE YEAR 1890-91 AND AGENCY OF EXPLOITATION.

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
I.—RESERVED FORESTS.																										
Cachar	....	123,350	.....	..	123,350	..	184	....	..	184	..	37	..	..	37	....	.....	....	..	.....		2,688	.....	..	2,688	126,259
Sylhet	....	40,025	.....	..	40,025	..	1,756	....	..	1,756	..	92	..	..	92	....	200	....	..	200	..	2,816	.....	..	2,816	44,889
Goalpara	13,638	154,869	.....	..	168,507	..	48,063	64,880	..	112,943	..	.....	..	..	.....	2,406	5,769	....	..	8,175	..	3,412	329,340	..	332,752	622,377
Kamrup	7,862	107,534	1,074	..	116,471	905	58	160	..	1,123	226	98	..	..	324	1,031	8,142	1,781	..	11,954	..	.....	108,400	..	108,400	238,272
Darrang	900	31,710	700	..	33,310	..	1,560	....	..	1,560	..	.....	..	..	.....	....	2,448	....	..	2,448	..	1,152	.....	..	1,152	39,470
Nowgong	....	4,410	.....	..	4,410	..	922	....	..	922	..	.....	..	..	.....	....	.....	1,180	..	1,180	..	2,204	.....	..	2,204	8,816
Sibságar	....	10,110	.....	..	10,110	..	384	....	..	384	..	.....	..	..	.....	....	630	....	..	630	..	1,664	.....	..	1,664	12,788
Lakhimpur	....	35,678	.....	..	35,678	..	....	....	..	.....	..	.....	..	..	.....	....	.....	....	..	.....	..	.....	.....	..	.....	35,678
Gáro Hills	....	34,632	.....	..	34,632	..	....	....	..	.....	..	.....	..	..	.....	....	931	....	..	931	..	.....	.....	..	.....	35,563
Total	22,401	542,318	1,774	..	566,493	905	52,927	65,040	..	118,872	226	227	..	..	453	3,437	20,120	2,961	..	26,518	..	14,036	437,740	..	451,776	1,164,112
II.—PROTECTED FORESTS.																										
Cachar	....	5,400	.....	..	5,400	..	....	....	..	.....	..	.....	..	..	.....	....	.....	....	..	.....	..	.....	.....	..	.....	5,400
Sylhet	....	14,368	.....	..	14,368	..	12	....	..	12	..	119	..	..	119	....	143	18,000	..	18,143	..	6,120	534,204	..	540,324	572,966
Kamrup	....	75	2,200	..	2,275	..	....	....	..	.....	..	.....	..	..	.....	....	.....	....	..	.....	..	.....	25,600	..	25,600	27,875
Sibságar	....	600	.....	..	600	..	....	....	..	.....	..	.....	..	..	.....	....	.....	....	..	.....	..	.....	.....	..	.....	600
Total	....	20,443	2,200	..	22,643	..	12	....	..	12	..	119	..	..	119	....	143	18,000	..	18,143	..	6,120	559,804	..	565,924	606,841
III.—UNCLASSED FORESTS.																										
Cachar	....	78,337	.....	..	78,337	..	1,468	8,284	..	9,752	..	1,033	..	..	1,033	1,347	450	....	..	1,797	..	5,015	60,480	..	65,495	156,414
Sylhet	....	4,746	.....	..	4,746	..	336	....	..	336	..	149	..	..	149	....	659	5,108	..	5,767	..	10,408	210,760	..	221,168	232,126
Goalpara	....	5,952	65,590	..	71,542	..	2,427	316	..	2,743	..	.....	..	..	.....	418	1,320	....	..	1,738	..	160	190,954	..	191,114	267,137
Kamrup	....	48,520	21,570	..	70,090	..	....	....	..	.....	..	29	..	..	29	....	.....	....	..	.....	..	3,392	80,800	..	84,192	154,311
Darrang	....	58,975	135,880	..	194,855	..	160	400	..	560	..	.....	..	..	.....	....	1,300	....	..	1,300	..	856	264,284	..	265,280	461,995
Nowgong	....	53,430	33,880	..	87,310	..	10,692	....	..	10,692	..	.....	..	..	.....	....	.....	....	..	.....	..	11,738	65,530	..	77,268	175,270
Sibságar	....	31,140	176,980	..	208,120	..	2,832	....	..	2,832	..	.....	..	..	.....	4,770	10,478	11,360	..	26,608	5,400	22,032	574,014	..	611,446	849,006
Lakhimpur	....	59,940	21,440	..	81,380	..	12	....	..	12	..	109,730	..	..	109,730	....	2,967	40	..	3,007	..	78,784	2,048	..	80,832	274,961
Khási and Jaintia Hills	....	604	.....	..	604	..	....	....	..	.....	..	.....	..	..	.....	....	.....	....	..	.....	..	12,178	.....	..	12,178	12,782
Garo Hills	..	111,334	720	..	112,054	..	....	....	..	.....	111	.....	..	..	111	583	86,945	....	..	87,528	60	.....	.....	..	60	199,703
Total	....	452,978	456,060	..	909,038	..	17,947	9,000	..	26,947	111	110,941	..	..	111,052	7,118	104,119	16,508	..	127,745	5,460	154,603	1,448,916	..	1,608,979	2,783,735
Grand Total	22,401	1,015,739	460,034	..	1,498,174	905	70,886	74,040	..	145,831	337	111,287	..		111,624	10,555	124,382	37,469	..	172,406	5,460	174,759	2,446,454	..	2,626,673	4,554,703

FORM No. 55.

Forest Department, Assam.—Outturn of Minor Forest Produce during the year 1890-91.

Division.	Description of produce.	Produce removed or utilized.									
		By Government Agency.		By purchasers.		By free grants.		By right holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
	(a) Reserved Forests										
Cachar ...	Bamboos (No.)	200	1	795,450	1,989	.....	.....	.....	.....	795,650	1,990
	Canes (bundles)	.....	.....	16,081	1,005	.....	.....	.....	.....	16,081	1,005
	Thatching grass (c.ft.)... ...	.....	.....	5,000	12	.....	.....	.....	.....	5,000	12
	Pathi (*dals*)	.....	.....	30,200	19	.....	.....	.....	.....	30,200	19
	Agar *mahál*	.....	.....	.....	467	.....	.....	.....	.....	.....	467
	Total	.....	1	.....	3,492	.....	.....	.....	.....	.....	3,493
Sylhet ...	Bamboos (No.)	.....	.....	461,580	1,154	.....	.....	.....	.....	461,580	1,154
	Canes (bundles)	.....	.....	4,306	269	.....	.....	.....	.....	4,306	269
	Reeds (c.ft.)	.....	.....	245	8	.....	.....	.....	.....	245	8
	Thatching grass (c.ft.) ...	.....	.....	270,900	677	.....	.....	.....	.....	270,900	677
	Pathi (*dals*)	.....	.....	78,850	49	.....	.....	.....	.....	78,850	49
	Agar (baskets)	.....	.....	1	1	.....	.....	.....	.....	1	1
	Total	.....	.....	.....	2,158	.....	.....	.....	.....	.....	2,158
Goálpára ...	Bamboos (No.)	.....	.....	.....	.....	3,380	34	.....	.....	3,380	34
	Canes (bundles)	.....	.....	900	7	.....	.....	.....	.....	900	7
	Total	.....	.....	.....	7	.....	34	.....	.....	.....	41
Kámrúp ...	Bamboos (No.)	2,154	33	396	4	80,350	803	.....	.....	82,900	840
	Canes (bundles)	1,363	10	.....	.....	2,728	20	.....	.....	4,091	30
	Reeds (c.ft.)	95	3	.....	.....	.....	.....	.....	.....	95	3
	Thatching grass (c.ft.) ...	3,566	9	.....	.....	.....	.....	.....	.....	3,566	9
	Betel creepers (No.)	.....	.....	57	7	.....	.....	.....	.....	57	7
	Total	.....	55	.....	11	.....	823	.....	.....	.....	889

FORM No. 55—*continued.*

Division.	Description of produce.	Produce removed or utilized.									
		By Government Agency.		By purchasers.		By free grants.		By right holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
Darrang ...	Bamboos (No.)	.....	.....	800	14	.....	.....	.....	.....	800	14
	India-rubber (seers)	8	8	.....	.....	.....	.....	.....	.....	8	8
	Total	.....	8	.....	14	.....	.....	...	.....	.....	22
Nowgong ...	Bamboos (No.)	.....	.....	1,100	11	.....	.....	.....	.....	1,100	11
	Canes (bundles)	.....	.....	10,857	81	.....	.....	.....	.....	10,857	81
	Thatching grass (c.ft.)... ...	.....	.....	8,600	22	.....	.....	.....	.....	8,600	22
	Murtha „ (bundles) ...	.....	.....	20	1	.....	.....	.....	.....	20	1
	Total	.....	.....	.....	115	.....	.....	.....	.....	.....	115
Sibságar ...	Bamboos (No.)	.....	.....	3,550	36	.....	.....	.....	.....	3,550	36
	Grazing (No.)	.....	.....	86	43	.....	.....	.....	.....	86	43
	Canes (bundles)	.....	.....	4,010	30	.....	.....	.....	.....	4,010	30
	Thatching grass (c.ft.)	.....	.....	2,500	8	.....	.....	.....	.....	2,500	8
	Elephant tusks (No.)	.....	.....	2	3	.....	.....	.....	.....	2	3
	Bilgrass (*Phrynium dichotomum*) *mahál.*	.....	.....	.....	100	.....	.....	.....	.....	.....	100
	Total	.....	.....	.....	220	.....	.....	.....	.....	.....	220
Lakhimpur ...	Bamboos (No.)	.....	.....	2,400	31	.....	.....	.....	.....	2,400	31
	Total	.....	.....	.....	31	.....	.....	.....	.....	.....	31
	Total Reserved Forests ...	.....	64	.....	6,048	.....	857	.....	.....	.....	6,969

		(b) PROTECTED FORESTS.									
Sylhet ...	Bamboos (No.)	.....	.....	509,443	1,002	1,191,750	2,949	.....	.....	1,701,193	3,951
	Canes (bundles)	.....	.....	3,250	203	20,057	1,254	.....	.....	23,307	1,457
	Reeds (c.ft.)	.....	.....	8,755	274	47,020	1,469	.....	.....	55,775	1,743
	Pathi (*dals*)	.....	.....	15,600	10	10,440	7	.....	.....	26,040	17
	Thatching grass	.....	.....	258,500	649	502,600	1,256	.....	.....	761,100	1,905
	" " *mahál* ...	.....	.....	.....	731	.....	.....	.....	.....	.....	731
	Total	.....	.....	.....	2,869	.....	6,935	.....	.....	.....	9,804
	Total Protected Forests ...	.....	.....	.....	2,869	.....	6,935	.....	.....	.....	9,804
	(c) *Unclassed State Forests and Waste Lands.*										
Cachar ...	Bamboos (No.)	.....	.....	405,975	1,015	67,100	168	.....	.....	473,075	1,183
	Canes (bundle)	.....	.....	2,344	146	1,671	104	.....	.....	4,015	250
	Reeds (c.ft.)	.....	.....	768	24	2,198	69	.....	.....	2,966	93
	Pathi (*dals*)	.....	.....	2,000	1	.....	.....	.....	.....	2,000	1
	Thatching grass (c.ft.) ...	.....	.....	26,200	65	12,000	30	.....	.....	38,200	95
	Murtha " (bundles) ...	.....	.....	220	7	240	7	.....	.....	460	14
	Agar *mahál*	.....	.....	.....	533	.....	.....	.....	.....	.....	533
	Total	.....	.....	.....	1,791	.....	378	.....	.....	.....	2,169
Sylhet ...	Bamboos (No.)	.....	.....	7,650	15	266,480	702	.....	.....	274,130	717
	Canes (bundles)	.....	.....	128	8	4,291	268	.....	.....	4,419	276
	Reeds (c.ft.)	.....	.....	104	3	10,498	328	.....	.....	10,602	331
	Pathi (*dals*)	.....	.....	9,100	6	7,000	4	.....	.....	16,100	10
	Thatching grass (c.ft.) ...	.....	.....	51,750	129	58,000	145	.....	.....	109,750	274
	" " *mahals* ...	.....	.....	.....	904	.....	.....	.....	.....	.....	904
	Total	.....	.....	.....	1,065	.....	1,447	.....	.....	.....	2,512
Goálpára ...	Grazing (No.)	.....	.....	15	8	.....	.....	.....	.....	15	8
	Canes (bundles)	.....	.....	14,017	105	4,111	31	.....	.....	18,128	136
	Reeds (c.ft.)	.....	.....	32,632	1,020	.....	.....	.....	.....	32,632	1,020
	Thatching grass (c.ft.) ...	.....	.....	2,495,593	6,239	.....	.....	.....	.....	2,495,593	6,239
	Total	.....	.....	.....	7,372	.....	31	.....	.....	.....	7,403

FORM No. 55—*continued.*

Division.	Description of produce.	Produce removed or utilised.									
		By Government Agency.		By purchasers.		By free grants.		By right holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
					Rs.		Rs.				Rs.
Kámrúp ...	Bamboos (No.)	.....	.....	.....	.....	34,750	347	.....	.....	34,750	347
	Grazing („)	.....	.....	91	23	.....	.....	.....	.....	91	23
	Canes (bundles)	.....	.....	.....	.....	472	4	.....	.....	472	4
	Trees for rearing silkworms (No.) ...	.....	.....	155	30	.....	.....	.....	.....	155	30
	Betel creepers (No.)	.....	.....	32	4	.....	.....	.....	.....	32	4
	Total	.....	.....	.....	57	.....	351	.....	.....	.....	408
Darrang ...	Bamboos (No.)	.....	.....	90	5	40,812	408	.....	.....	40,902	413
	Lac (mds.)	.....	.....	5	24	.....	.....	.....	.....	5	24
	Elephant tusks (No.)	.....	.....	2	700	.....	.....	.....	.....	2	700
	Canes (bundles)	.....	.....	.....	.....	9,928	74	.....	.....	9,928	74
	„ *mahál*	.....	.....	.....	430	.....	.....	.....	.....	.....	430
	India-rubber *mahál*	.....	.....	.....	21,005	.....	.....	.....	.....	.....	21,005
	Pipul (pepper) „	.....	.....	.....	175	.....	.....	.....	.....	.....	175
	Total	.....	.....	.....	22,339	.....	482	.....	.....	.....	22,821
Nowgong ...	Bamboos (No.)	.....	.....	3,169	32	19,550	195	.....	.....	22,719	227
	Grazing („)	.....	.....	27	6	.....	.....	.....	.....	27	6
	Canes (bundles)	.....	.....	40,038	300	1,850	14	.....	.....	41,888	314
	Total	.....	.....	.....	338	.....	209	.....	.....	.....	547
Sibságar ...	Bamboos (No.)	.....	.....	1,625	31	98,442	984	.....	.....	1,00,067	1,015
	Grazing („)	.....	.....	2,362	1,180	.....	.....	.....	.....	2,362	1,180
	Canes (bundles)	.....	.....	500	4	12,597	94	.....	.....	13,097	98
	„ *mahál*	.....	.....	.....	518	.....	.....	.....	.....	.....	518
	Lac „	.....	.....	.....	50	.....	.....	.....	.....	.....	50
	Total	.....	.....	.....	1,783	.....	1,078	.....	.....	.....	2,861

Lakhimpur ...	Bamboos (No.)	.....	.....	18,470	212	19,900	268	.....	.....	38,370	480
	Grazing „	.....	.....	459	113	.....	.....	.....	.....	459	113
	Pathi (*dáli*)	.....	.....	8,000	8	22,680	23	.....	.....	30,680	31
	Canes (bundles)	.....	.....	22,066	166	727	6	.....	.....	22,793	172
	„ *mahál*	.....	.....	.....	1,900	.....	.....	.....	.....	.....	1,900
	Total	.....	.....	.....	2,399	.....	297	.....	.....	.....	2,696
Nága Hills ...	India-rubber *mahál*	.....	.....	.....	517	.....	.....	.....	.....	.....	517
	Total	.....	.....	.....	517	.....	.....	.....	.....	.....	517
Khási and Jaintia Hills.	Reeds (c. ft.)	.....	.....	429	55	.....	.....	.....	.....	429	55
	Thatching grass (c. ft.) ...	.....	.....	517	32	.....	.....	.....	.....	517	32
	Pear fruits	.....	.....	.....	21	.....	.....	.....	.....	.....	21
	India rubber *mahál*	.....	.....	.....	700	.....	.....	.....	.....	.....	700
	Cassia (cinnamon) *mahál* (c. ft.) ...	.....	.....	.....	62	.....	.....	.....	.....	.....	62
	Total	.....	.....	.....	870	.....	.....	.....	.....	.....	870
Gáro Hills ...	Foreign gurkati permits (No.) ...	.....	.....	5,850	11,700	.....	.....	15	30	5,865	11,730
	Gáro „ „ („) ...	.....	.....	2,125	2,125	.....	.....	.....	.....	2,125	2,125
	Grazing („) ...	.....	.....	2,879	1,439	.....	.....	.....	.....	2,879	1,439
	Drift and waif bamboos („) ...	1,965	5	.....	.....	.....	.....	.....	.....	1,965	5
	Confiscated bamboo mats („) ...	16	1	.....	...	.....	.....	.....	.....	16	1
	India-rubber (seers) ...	24	36	.....	.....	.....	.....	.....	.....	24	36
	Total	.....	42	.....	15,264	.....	.....	.....	30	.....	15,336
	Total Unclassed Forests ...	.....	42	.....	53,795	.....	4,273	.....	30	.....	58,140
	Grand total	.....	106	.....	62,712	.....	12,065	.....	30	.....	74,913
	Abstract of Circle.										
	Foreign gurkati permits (No.) ...	.....	.....	5,850	11,700	.....	.....	15	30	5,865	11,730
	Garo „ „ („) ...	.....	.....	2,125	2,125	.....	.....	.....	.....	2,125	2,125
	Bamboo („) ...	4,319	39	2,211,698	5,551	1,822,514	6,858	.....	.....	4,038,531	12,448
	„ mats („) ...	16	1	.....	.....	.....	.....	.....	.....	16	1
	Grazing („) ...	.....	.....	5,919	2,812	.....	.....	.....	.....	5,919	2,812

FORM No. 55—*concluded.*

Division.	Description of produce.	Produce removed or utilized.									
		By Government Agency.		By purchasers.		By free grants.		By right holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
	Canes (bundles)	1,363	10	118,497	2,324	58,432	1,869	.....	.....	178,292	4,203
	Reeds (c. ft.)	95	3	42,933	1,384	59,716	1,866	.....	.....	102,744	3,253
	Thatching grass (c. ft.) ...	3,566	9	3119,560	7,833	572,600	1,431	.....	.....	3,695,726	9,273
	Murtha grass, bundles	.....	.....	240	8	240	7	.....	.....	480	15
	Parthi (*dals*)	.....	.....	143,750	93	40,120	34	.....	.....	183,870	127
	India-rubber (seers)	32	44	.....	.....	.....	.....	.....	.....	32	44
	Agar (basket)	.....	.....	1	1	.....	.....	.....	.....	1	1
	Lac (mds.)	.....	.....	5	24	.....	.....	.....	.....	5	24
	Elephant tusks (No.) ...	.....	.....	4	703	.....	.....	.....	.....	4	703
	Fruits	.....	.....	.....	21	.....	.....	.....	.....	.....	21
	Betel creepers (No.)	.....	.....	89	11	.....	.....	.....	.....	89	11
	Trees for rearing silkworms (No) ...	.....	.....	155	30	.....	.....	.....	.....	155	30
	India-rubber *mahál*	.....	.....	.....	22,222	.....	.....	.....	.....	.....	22,222
	Cane „	.....	.....	.....	2,848	.....	.....	.....	.....	.....	2,848
	Agar „	.....	.....	.....	1,000	.....	.....	.....	.....	.....	1,000
	Lac „	.....	.....	.....	50	.....	.....	.....	.....	.....	50
	Thatching grass „	.....	.....	.....	1,635	.....	.....	.....	.....	.....	1,635
	Bil grass (*Phrynium dichotomum*) *mahál.*	.....	.....	.....	100	.....	.....	.....	.....	.....	100
	Pipul (pepper) *mahál* ...	.....	.....	.....	175	.....	.....	.....	.....	.....	175
	Cassia (cinnamon) *mahál* ...	.....	.....	.....	62	.....	.....	.....	...	.....	62
	Total	.....	106	.....	62,712	.....	12,065	.....	30	.....	74,913

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1890-91.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Cachar Division—				
Drift logs (miscellaneous) ...	5	74	5	74
Gáro Hills Division—				
Sleepers	5,841	7,272		
Beams	53	473		
Sâl logs...	221	5,754		
Sam „	1	26		
„ planks	15	24		
Confiscated logs (Sâl) ...	4	40		
Waif „ („) ..	2	57		
„ „ (miscellaneous.)	4	45		
			6,141	13,691
Darrang Division—				
India-rubber (mds.)	1-24-8	.....		
Received from forests in depôts.			.....	.....
Sâl logs	1,216	22,366		
Gunseroi „	2	35		
Teak poles	48	118		
Miscellaneous „	625	683		
Sâl planks	111	226		
„ beams	16	111		
„ baklas	19	34		
Dead wood (Sâl)	14	100		
„ (Sisu)	53	480		
Makria boat	1	35		
Drift „ (miscellaneous) ...	4	120		
„ wood („) ...	59	1,653		

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Removed by purchasers from depôts.				
Sâl logs	150	2,506		
Teak poles	19	8		
Miscellaneous poles... ...	1	5		
Sam planks	67	44		
„ scantlings	10	5		
Sâl sleepers	3,662	4,967		
Dead wood (Sâl)	4	51		
Drift „ „	236	1,850		
„ „ (miscellaneous) ...	10	356		
„ boats („) ...	4	120		
Firewood	.....	3,575		
India-rubber (mds.) ...	1-27-8	.....	4,163	13,487
Received from the forests and sold locally.				
Sâl poles	9	21		
Teak „	10	72		
Miscellaneous poles... ...	2	11		
Sâl baklas	241	321		
Plough pieces	4	24		
Sâl boats	2	112		
Dead wood (Sâl)	2	4		
„ „ (miscellaneous) ...	97	257		
Drift „ (Sâl)	24	138		
„ „ (miscellaneous) ...	601	5,293		
„ boats (Sâl)	3	70		
„ firewood	6	60		
„ bamboos, (No.) ...	1,965	.....		
Confiscated bamboo mats (No.) ..	16	.....	1,001	6,383

FORM No. 56—*concluded.*

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Drift wood (Sâl)	254	1,915		
Firewood	.....	5,400		
Bamboos (No.)	2,154	.....		
Canes (bundles)	1,363	.....		
Reeds (c. ft.)	95	.....		
Thatching-grass (c. ft.) ...	3,566	.....		
India-rubber (mds.)	0-32-1	.....	2,422	33,276
Received from forests and sold locally.				
Sâl poles	9	21		
Teak „	10	72		
Miscellaneous poles	2	11		
Sâl baklas	241	321		
Plough pieces	4	24		
Sâl boats	2	112		
Dead wood (Sâl)	2	4		
„ (miscellaneous) ...	97	257		
Drift wood (Sâl)	24	138		
„ „ (miscellaneous) ...	601	5,293		
„ boats (Sâl)	3	70		
„ firewood	6	60		
„ bamboos (No.)... ...	1,965	.....		
Confiscated bamboo mats (No.) ...	16	.....	1,001	6,383
Received by remeasurement in depôt.				
Sâl logs	.....	77		
„ sleepers	.....	967	.....	1,044
Received by conversion in depôts.				
Sâl logs	10	146		
Sam planks	53	20		

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Reduced on remeasurement in depôts.				
Sâl logs	.....	1,180		
„ beams	.....	104	.....	
Written off as useless.				
Sleepers	959	1,278	959	1,278
Converted in depôts.				
Sam log	1	26		
Sâl „	3	146	4	172
Lost and used by the Department.				
Sâl logs	44	1,041		
Teak poles	29	110		
Miscellaneous poles	624	678		
Sâl planks	25	55		
„ beams	8	58		
„ sleepers	773	1,248		
Sam planks	1	.....		
„ scantlings	4	1		
Makria boat	1	35		
Sâl baklas	19	34		
Dead wood (Sâl)	7	24		
Drift „ („)	14	62		
„ „ (miscellaneous) ...	4	45		
Bamboos (No.)	2,154	.....		
Canes (bundles)	1,363	.....		
Reeds (c. ft.)	95	.....		
Thatching grass (c. ft.) ...	3,566	.....	1,553	3,391

Sam scantlings	14	6	77	172	*Balance at close of the year.*					
					Cachar Division—					
					Drift logs (miscellaneous) ...	51	1,321			
					„ bamboos (No.) ...	200	.....	51	1,321
					Goálpára Division—					
					Sâl logs	700	11,147		
					Gunseroi logs	2	35		
					Dead wood (Sâl)	3	25		
					„ (Sisu)	53	480	758	11,687
					Kámrúp Division—				
					Sâl logs	326	7,574		
					„ planks	86	171		
					Drift wood (Sâl)	6	60		
					„ (miscellaneous) ...	3	50	421	7,855
					Darrang Division—				
					India-rubber (mds.) ...	0-8-1	.....	.....	.....
					Sibságar Division—				
					Firewood	.....	1,825	.....	1,825
					Gáro Hills Division—				
					Sâl logs	228	4,789		
					„ sleepers	447	746		
					„ beams	61	422		
					India-rubber (mds.) ...	0-21-0	.....	736	5,957
Grand total	.....	.....	9,646	54,640	Grand total	.....	.....	9,646	54,640

ANNUAL FORM No. 57.

Forest Department, Assam.—Abstract showing the Value of Timber and other Produce at Sale Depots for the year 1890-91.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. ft.	Value.	Number.	C. ft.	Value.	In favour of the year.	Against the year.
			Rs.			Rs.	Rs.	Rs.
Cachar Division.								
Drift logs ...	5	74	5	51	1,321	60	55	.....
„ bamboos ...	.....	.....	.....	200	.....	2	2	.....
Total	.....	.....	5	.....	.....	62	57	.....
Goálpára Division.								
Sál logs ...	.....	.....	.....	700	11,147	9,688	9,688	.....
Dead Sál logs ...	.....	.....	.....	3	25	25	25	.....
„ Sisu „ ...	.....	.....	.....	53	480	240	240	.....
Gunserai „ ...	.....	.....	.....	2	35	35	35	.....
Total	.....	.....	.....	.....	.....	9,988	9,988	.....
Kámrúp Division.								
Sál logs ...	.....	.....	.....	326	7,574	4,000	4,000	.....
„ „ (drift) ...	.....	.....	.....	6	60	15	15	.....
Ajhar logs („) ...	.....	.....	.....	3	50	7	7	.....
Total	.....	.....	.....	.....	.....	4,022	4,022	.....
Darrang Division.								
India-rubber (mds.) .	1-24-8	.....	100	0-8-1	.....	8	.....	92
Total	.....	.....	100	.....	.....	8	.....	92
Sibságar Division.								
Firewood ...	.....	.....	.....	.....	1,825	91	91	.....
Total	.....	.....	.....	.....	.....	91	91	.....
Gáro Hills Division.								
Sál logs ...	221	5,754	818	228	4,789	844	26	.....
„ sleepers ...	5,841	7,272	4,625	447	746	447	.....	4,178
„ beams ...	53	473	159	61	422	183	24	.....
„ logs (confiscated)	4	40	4	.....	.....	.....	.....	4
„ „ (waif) . .	2	57	6	.....	.....	.....	.....	6
Second-class logs (waif).	4	45	3	.....	.....	.....	.....	3
Sam logs ...	1	26	3	.....	.....	.....	.....	3
„ planks ...	15	24	26	.....	.....	.....	.....	26
India-rubber (mds)...	.....	.....	.....	0-21-0	.....	31	31	.....
Total	.....	.....	5,644	.....	.....	1,505	81	4,220
Grand total ...	.....	.....	5,749	.....	.....	15,676	14,239	4,312

Net difference in favour of the year Rs. 9,927.

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1890-91.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
DIRECTION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	7	45	7	47	2	.....
Tools	23	68	21	61	.....	7
Office and rest house furniture ...	62	1,091	73	1,251	160	.....
Tent	1	100	1	100	.....	.....
Miscellaneous	.....	115	.....	108	.....	7
Live Stock.						
Elephants	2	3,800	.....	.....	.....	3,800
Total	.....	5,219	.....	1,567	162	3,814
WORKING PLANS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	469	1,162	421	1,291	129	.....
Tools	158	143	248	249	106	.....
Office and rest-house furniture ...	18	226	30	378	152	.....
Tent	1	100	1	100	.....	.....
Miscellaneous	.....	311	.....	369	58	.....
Live Stock.						
Elephants	2	3,000	7	11,850	8,850	.....
Bullocks	2	100	.....	.....	.....	100
Total	650	5,042	.....	14,237	9,295	100
CACHAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	13	300	13	300	.....	.....
Tools	340	600	301	530	.....	70
Office and rest house furniture ...	124	1,170	124	1,170	.....	.....
Tents	2	90	2	60	.....	30
Miscellaneous	.....	240	.....	240	.....	40
Buildings.						
Divisional and office bungalows, Revenue stations and inspection houses	6	8,000	6	7,850	.....	150
Other houses	35	1,000	29	830	.....	170
Live Stock.						
Elephant	1	1,500	1	1,500	.....	.....
Total	.....	12,900	.....	12,440	.....	460

FORM No. 57– *continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value	In favour of the year.	Against the year.
SYLHET DIVISION.						
Stores, Tools and Plant.		Rs.		Rs.	Rs.	Rs.
Surveying and other instruments ...	40	153	40	153	.....	.....
Tools	60	229	69	249	20	.....
Office and rest house furniture ...	55	1,012	65	1,096	84	.....
Miscellaneous	.....	275	.....	232	.....	43
Buildings.						
Office and rest houses	7	640	6	500	.....	140
Other houses	19	345	18	325	.....	20
Total	.....	2,654	.....	2,555	104	203
GOÁLPÁRA DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	35	197	31	125	.....	72
Machinery	2	500	4	600	100	.....
Tools	327	417	463	495	78	.....
Office and rest house furniture ...	74	941	103	992	51	.....
Miscellaneous	.....	705	.....	1,136	431	.....
Buildings.						
Dhubri bungalow	1	8,000	1	8,000	.....	.....
Other houses	25	1,080	26	1,180	100	.....
Live Stock.						
Elephants	6	11,000	13	21,650	10,650	.....
Total	.....	22,840	.....	34,178	11,410	72
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	40	117	41	117	.....	.....
Tools	647	1,111	682	1,579	468	.....
Office and rest house furniture ...	84	1,007	87	1,029	22	.....
Tent	1	15	1	15	.....	.....
Miscellaneous	.....	2,033	.....	2,429	396	.....
Buildings.						
Gauháti bungalow	1	5,658	1	5,658	.....	.....
Kulsi plantation bungalow	1	3,000	1	3,000	.....	.....
Other houses	78	1,200	78	1,200	.....	.....
Live Stock.						
Elephants	5	8,000	5	8,000	.....	.....
Total	.....	22,141	.....	23,027	886	.....

FORM No. 57—*continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
Darrang Division.						
Stores, Tools and Plant.		Rs.		Rs.	Rs.	Rs.
Surveying and other instruments ...	72	339	72	339	.....	.....
Tools	764	1,222	837	1,446	224	.....
Office and rest house furniture ...	146	1,040	153	1,183	143	.....
Miscellaneous	.....	532	.....	482	.....	50
Buildings.						
Plantation bungalow	1	4,900	1	4,800	.....	100
Bhairabighát bungalow and inspection houses.	3	3,600	3	3,500	.....	100
Other houses	19	1,300	19	1,200	.....	100
Live Stock.						
Elephant	.....	.....	1	1,500	1,500	.....
Total	.....	12,933	.....	14,450	1,867	350
Nowgong Division.						
Stores, Tools and Plant.						
Surveying and other instruments ...	17	129	17	129	.....	.....
Tools	228	275	234	285	10	.....
Office and rest house furniture ...	37	676	41	684	8	.....
Tent	.....	.....	1	100	100	.....
Miscellaneous	.....	6	.....	3	.....	3
Buildings.						
Inspection houses	2	150	2	150	.....	.....
Other houses	16	310	16	310	.....	.....
Live Stock.						
Elephant	1	1,800	1	1,800	.....	.....
Total	.....	3,346	.....	3,461	118	3
Sibságar Division.						
Stores, Tools and Plant.						
Surveying and other instruments ...	32	60	32	60	.....	.....
Tools	314	170	347	277	107	.....
Office and rest house furniture ...	79	966	138	1,170	204	.....
Tents	3	105	3	105	.....	.....
Miscellaneous	.....	553	.....	580	27	.....
Buildings.						
Sibságar bungalow	1	5,000	1	5,356	356	.....
Golághát bungalow and inspection houses.	5	4,820	5	4,820	.....	.....
Other houses	26	660	27	730	70	.....
Live Stock.						
Elephant	1	1,200	1	1,200	.....	.....
Total	.....	13,534	.....	14,298	764	.....

FORM No. 57—*concluded.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
LAKHIMPUR DIVISION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	29	661	33	678	17	.....
Tools	134	439	134	439	.....	.....
Office and rest house furniture ...	64	1,138	68	1,180	42	.....
Tents	2	95	2	95	...	.....
Miscellaneous	.....	920	.....	1,641	121	.....
Buildings.						
Lakhimpur bungalow	1	8,510	1	8,510	.....	.....
Margherita "	1	3,092	1	3,342	250	.....
Other houses	27	2,227	.....	2,626	399	.....
Live Stock.						
Elephants	2	3,000	2	3,000	.....	.....
Total	.....	20,082	.....	20,911	829	.....
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Office and rest house furniture ...	1	30	1	30	.....	.....
Miscellaneous	.....	120	.....	120	.....	.....
Buildings.						
Small house	.....	.....	1	100	100	.....
Total	.....	150	.....	250	100	.....
GÁRO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	102	530	97	525	.....	5
Tools	144	150	274	220	70	.....
Office and rest house furniture ...	46	1,195	47	1,200	5	.....
Miscellaneous	.....	400	.....	387	.....	13
Buildings.						
Tura bungalow	1	5,437	1	5,437	.....	.....
" godown	1	1,881	1	1,881	...	.....
Inspection and other houses ...	8	912	8	2,532	1,620	.....
Live Stock.						
Elephant	1	1,500	1	1,500	.....	.....
Total	.....	12,005	.....	13,682	1,695	18
Grand Total	.....	132,846	.....	155,056	27,230	5,020

Net difference in favour of the year Rs. 22,210.

FORM No. 58.

FORM No. 58.

Forest Department, Assam.—Summary of Revenue and Expenditure of the Different Divisions during 1890-91.

Budget heads.	Direction.	Working Plans Division.	Cachar Division.	Sylhet Division.	Goalpára Division.	Kámrúp Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Nága Hills Division.	Khási and Jaintia Hills Division.	Gáro Hills Division.	Total.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency—														
a. Timber	.....	.....	.....	.....	2,158 15 0	212 14 0	.....	.....	.....	.....	.....	.....	1,474 11 0	3,846 8 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	191 8 0	.....	.....	.....	.....	191 8 0
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	.....	42 8 0	.....	.....	.....	.....	.....	4 8 0	47 0 0
II.—Timber and other produce removed from the forests by consumers or purchasers—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,825 0 0	13,825 0 0
a. Timber	.....	.....	22,650 10 6	8,103 5 6	60,665 11 9	42,064 4 6	7,017 11 2	8,602 9 3	9,718 6 6	17,142 4 7	.....	227 0 6	18,882 7 3	2,02,074 7 6
b. Firewood and charcoal..	.....	.....	123 5 3	285 6 3	52 13 0	55 0 0	28 0 0	213 6 6	499 8 0	1,209 6 0	.....	7 0 0	.....	2,483 13 0
c. Bamboos	.....	.....	2,999 7 0	2,162 9 9	.....	3 15 3	12 8 6	42 12 3	67 0 0	243 6 3	.....	.....	.....	5,532 11 0
d. Grazing and fodder grass	.....	.....	.....	.....	7 8 0	22 12 0	.....	27 6 0	1,222 0 0	113 4 0	.....	.....	1,439 8 0	2,833 6 0
e. Other minor produce	.....	.....	1,947 15 1	4,010 4 3	7,370 9 9	64 10 0	22,333 10 0	382 12 9	429 9 3	3,606 0 0	516 10 8	1,136 1 0	.....	41,798 2 9
III.—Drift and waif wood and confiscated forest produce ..	.....	.....	189 0 0	256 15 6	461 15 6	121 12 0	50 0 0	468 1 2	596 3 0	65 2 3	.....	.....	213 3 6	2,422 4 11
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce ..	.....	.....	4,821 15 6	.....	.....	.....	.....	.....	.....	216 0 0	.....	.....	.....	5,037 15 6
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	1,959 14 0	.....	.....	.....	.....	.....	504 12 0	4,704 2 9	7,168 12 9
V.—Miscellaneous—														
a. Fines and forfeitures	.....	.....	216 0 0	184 12 3	451 10 0	171 6 0	16 0 0	97 9 9	1 0 0	70 8 0	.....	.....	497 14 0	1,706 12 0
b. Refunds	.....	.....	29 0 0	1,002 3 0	0 14 0	10 5 4	2 0 0	.....	0 12 0	.....	.....	.....	.....	1,045 2 4
c. Other sources	242 0 0	6 10 0	4,973 0 8	24,058 14 3	1,834 0 0	2,379 7 9	199 0 0	776 8 0	773 13 0	655 15 3	.....	83 2 0	797 4 1	36,779 11 0
Total Receipts	242 0 0	6 10 0	37,950 6 0	40,065 6 9	73,004 1 0	54,066 4 10	29,711 5 8	10,611 1 8	13,500 11 9	23,321 14 4	516 10 8	1,957 15 6	41,838 10 7	3,26,793 2 9

EXPENDITURE.

A.—Conservancy and Works.

I.—Timber and other produce removed from the forests by Government Agency—														
a. Timber	.....	.....	.....	.....	2,733 1 0	914 3 6	.....	.....	.....	.....	.....	.....	485 15 2	8,133 3 8
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	151 5 0	.....	.....	.....	.....	151 5 0
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	2,743 8 2	14 0 0	.....	.....	.....	.....	.....	10 8 0	2,768 0
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	1,023 14 0	238 6 3	3,653 6 6	1,977 15 5	581 10 0	235 14 2	166 12 9	342 1 2	2,654 12 10	.....	.....	2,456 8 9	13,341 5 10
III.—Drift and waif wood and confiscated forest produce ..	.....	.....	42 2 8	11 0 0	.....	5 3 6	.....	9 0 0	147 11 0	.....	.....	.....	.....	215 1 2
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	583 3 3	583 3 3
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant—														
a. Purchase of cattle	.....	.....	.....	.....	2,000 0 0	3,450 0 0	.....	.....	.....	4,800 0 0	.....	.....	.....	10,250 0 0
b. Feed and keep of cattle..	374 10 3	1,331 2 8	355 2 3	12 10 0	2,231 3 0	2,065 0 8	85 2 3	348 3 11	372 13 10	960 12 4	.....	.....	419 9 9	8,556 6 11
c. Purchase of stores, tools and plant	67 6 9	401 11 5	1 9 0	227 8 0	554 12 6	863 1 3	404 8 9	128 8 0	254 3 6	173 3 0	.....	.....	265 5 9	3,339 13 2
VII.—Communications and buildings—														
a. Roads and bridges	163 9 6	.....	306 14 0	.....	18 7 10	1,084 4 3	1,354 13 7	.....	313 9 0	130 3 0	.....	.....	114 2 0	3,485 15 2
b. Buildings	.....	.....	349 0 9	191 0 0	999 13 1	1,825 4 7	183 9 0	392 0 0	1,297 12 6	1,067 0 7	.....	79 3 8	1,667 3 5	8,051 15 7
c. Other works	.....	.....	135 2 2	.....	3 3 6	.....	.....	.....	.....	5 10 9	.....	5 2 0	30 0 0	179 9 5
VIII.—Demarcation, improvement, and extension of forests—														
a. Demarcation..	.....	.....	579 7 10	.....	222 3 0	819 8 6	77 4 0	242 12 0	446 2 0	992 0 0	.....	2 12 0	474 15 5	3,857 0 9
b. Compensation for land and rights	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Surveys and working plans	117 3 0	10,598 10 6	94 6 0	340 5 0	17,001 13 0	.....	.....	.....	2 4 0	9 0 0	.....	.....	.....	28,163 10 6
d. Sowing and planting	.....	.....	6 12 0	2 0 0	41 14 6	774 5 3	10,124 1 0	40 8 0	449 6 0	80 10 0	.....	53 11 0	285 3 4	11,858 7 1
e. Protection from fire	.....	.....	.....	.....	8,838 11 6	3,209 1 1	358 9 0	982 10 1	.....	.....	.....	1,246 2 7	3,547 7 6	18,182 9 9
f. Other works	728 13 9	.....	558 0 0	1,714 6 0	1,819 9 6	2,566 13 9	54 10 11	1,288 10 9	1,877 7 3	192 13 6	.....	697 8 0	1,331 5 2	12,739 9 7
IX.—Miscellaneous—														
a. Refunds	.....	.....	.....	.....	.....	.....	.....	.....	9 9 0	10,350 0 0	.....	.....	.....	10,359 9 0
b. Law charges	.....	.....	120 0 0	120 0 0	131 0 9	1 8 0	.....	.....	.....	241 4 0	.....	.....	24 5 6	638 2 3
c. Other charges	177 1 0	224 7 11	68 3 6	115 1 3	382 8 0	697 15 10	382 7 0	48 5 6	213 0 3	352 2 6	.....	5 2 0	366 3 0	3,032 9 9
Total A.—Conservancy and Works	1,628 12 3	13,579 14 6	2,855 2 5	6,287 5 9	39,955 11 7	21,601 8 4	13,274 15 8	3,647 7 0	5,877 4 6	22,009 8 8	.....	2,009 0 3	12,063 15 3	1,44,887 10 9

FORM No. 58—*continued.*

Budget heads.	Direction.	Working Plans Division.	Cachar Division.	Sylhet Division.	Goalpára Division.	Kámrúp Division.	Darrang Division.	Nowgong Division.	Sibsagar Division.	Lakhimpur Division.	Naga Hills Division.	Khasi and Jaintia Hills Division.	Gáro Hills Division.	Total.
B.—ESTABLISHMENTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Salaries—														
a. Conservators.	17,814 8 3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17,814 8 3
b. Superior officers	250 0 0	5,080 0 0	5,805 11 8	1,800 0 0	7,800 0 0	7,100 0 0	2,446 10 8	1,200 0 0	4,012 9 0	10,483 13 11	.....	.....	4,207 7 2	52,187 [illegible] 3
c. Subordinate forest and depôt establishments	1,010 0 0	320 0 0	4,261 9 9	459 5 9	2,253 15 6	3,759 9 2	2,584 3 2	1,065 8 8	3,095 1 0	3,964 8 1	.....	983 8 0	3,359 0 6	38,116 5 6
d. Office establishments	5,066 3 2	498 12 7	1,003 0 0	790 7 3	1,008 0 0	1,195 11 1	806 1 0	669 4 8	1,041 10 10	983 15 2	.....	.....	1,169 9 1	14,081 1 10
e. Deputation and special allowances	.....	.....	.....	.....	.....	.....	366 3 9	300 0 0	250 0 0	.....	.....	.....	1,156 0 4	2,072 4 1
II.—Travelling Allowances—														
a. Conservators	2,000 1 9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000 1 9
b. Superior officers	406 7 0	1,471 11 0	742 8 0	364 12 0	1,535 0 0	1,631 11 3	883 3 9	733 2 0	323 7 9	1,440 10 0	.....	.....	1,642 [illegible] 0	11,575 13 9
c. Subordinate forest and depôt establishments	282 12 0	151 6 0	636 8 6	196 7 0	312 15 0	649 8 0	516 8 0	381 0 0	618 13 6	874 8 5	.....	.....	511 10 9	5,032 0 7
d. Office establishments	5 0 0	216 8 0	125 1 6	83 4 0	.....	.....	45 0 0	7 12 0	.....	97 4 6	.....	.....	3 9 0	582 14 0
III.—Contingencies—														
a. Stationery	8 14 0	11 12 0	0 14 3	.....	.....	.....	.....	.....	1 8 0	0 8 0	.....	.....	5 0 0	28 8 3
b. Carriage of tents and records	39 4 0	16 9 0	27 8 0	.....	.....	.....	.....	.....	5 0 0	0 8 0	.....	.....	.....	88 12 9
c. Rents, rates, and taxes	360 0 0	360 0 0	50 4 0	.....	36 0 0	38 2 0	.....	.....	40 0 0	23 3 0	.....	.....	.....	907 9 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	355 5 0	47 0 6	118 7 6	302 11 6	55 5 6	142 14 0	88 11 6	77 0 6	148 5 6	156 10 6	.....	.....	198 10 6	1,692 2 6
f. Sundries	541 2 8	243 0 6	324 0 0	64 11 9	452 11 0	221 0 1	171 9 6	72 14 4	204 6 5	162 6 9	.....	.....	308 9 0	2,783 8 9
Total B.—Establishment	28,139 9 10	8,416 11 7	13,095 9 2	3,972 11 3	14,453 15 0	14,748 7 8	7,910 3 4	4,406 10 2	10,241 14 10	18,194 0 4	.....	983 8 0	14,401 10 9	1,38,964 15 11
Grand Total of Expenditure	29,768 6 1	21,996 10 1	15,950 11 7	10,360 1 0	54,409 10 7	36,330 0 0	21,185 3 0	8,954 1 2	16,119 2 4	40,203 8 10	.....	2,983 8 3	26,471 10 0	2,82,552 9 11

CALCUTTA,

The 16th June 1891.

I. C. BOSE,

Assistant Comptroller General (Forests).

FORM No. 59.

Forest Department, Assam.—Account Current for the year 1890-91

Dr.

	Rs. a. p.	Rs. a. p.
To Cash Balance	.....	1,082 3 8
" VIII.—Assessed Taxes—Income tax—		
" Deductions from salaries .. .	.....	2,071 3 7
" Revenue as per Annual Summary, form No. 58.	.....	3,26,793 2 9
" Service Funds—		
Civil Fund Ordinary, Bengal ..	.....	
" Additional, Bengal ..	.....	
Military Fund—Bengal ..	.....	
" " Madras ..	.....	
" Orphan Fund ..	.....	
Uncovenanted Service Family Pension Fund, Bengal.	876 14 8	
General Family Pension Fund ..	.....	
Hindu Family Annuity Fund ..	.....	
		876 14 8
" Deposits	.....	2 0 0
" Forest Cash Remittances, Local—		
Forest cheques drawn	2,64,790 9 8	
Inter-divisional transfers ..	3,640 3 8	
		2,68,430 13 4
" Advances recoverable	.....	1,28,547 14 0
" Suspense	.....	623 3 7
" Account Current (other Governments)—	.....	
Remittances from Government of India.	29,658 2 7	
Remittances from Government of Bengal	28 11 0	
Remittances from Government of Central Provinces.	200 0 0	
		29,831 13 7
" Inter-departmental Transfers—	.....	
Public Works Department ..	.....	
Military Department	.....	
Civil Department—	.....	
Jail	77 14 0	
Mathematical Instrument Department.	4 8 0	
Miscellaneous	215 7 8	
Survey	252 7 0	549 15 8
Total	.....	7,58,759 4 10

Cr.

	Rs. a. p.	Rs. a. p.
By Expenditure as per Annual Summary, Form 58.	.....	2,52,852 9 11
" Deposits	.....	
" Forest Cash Remittances, Local—		
Remittances to Treasuries ..	3,24,060 13 3	
Inter-divisional transfers ..	3,622 10 4	
		3,27,683 7 7
" Advances recoverable	.....	1,31,647 1 8
" Suspense	.....	627 7 7
" Account current (other Governments)—		
Remittances to the Government of India.	.....	10,382 4 0
" Inter-Departmental Transfers—		
Public Works Department Ordinary Branches.	1,999 3 0	
Military Department ..	.....	
Civil Department— ..	.....	
Jail 33 0 0		
Mathematical Instrument Department. 7 8 0		
Miscellaneous .. 1,038 5 6		
Police .. 17 14 0	1,096 11 6	
		3,095 14 6
" Cash balance	.....	1,470 7 7
Total	.....	7,58,759 4 10

Calcutta,

The 16th June 1891.

I. C. Bose,

Assistant Comptroller General, Forests.

FORM No. 60.

Forest Department, Assam.—Revenue received and Outstandings on Account of Revenue during 1890-91.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	R. a. p.	Rs. a. p.
Direction ...	Price of timber and other produce.	.....	242 0 0	242 0 0	42 0 0	.....
Working Plans ...	Ditto ditto ...	.....	6 10 0	6 10 0	6 10 0	.....
Cachar ...	Ditto ditto ...	2,173 13 5	39,707 11 7	41,881 9 0	37,950 6 0	3,931 3 0
Sylhet ...	Ditto ditto ...	.....	40,065 6 9	40,065 6 9	40,065 6 9	.....
Goálpára ...	Ditto ditto ...	42,169 8 0	45,698 9 0	87,868 1 0	73,004 1 0	14,864 0 0
Kámrúp ...	Ditto ditto ...	20,101 0 0	51,282 4 10	71,383 4 10	54,066 4 10	17,317 0 0
Darrang ...	Ditto ditto ...	.....	29,711 5 8	29,711 5 8	29,711 5 8	.....
Nowgong ...	Ditto ditto ...	20 0 0	10,601 9 8	10,621 9 8	10,611 1 8	10 8 0
Sibságar ...	Ditto ditto ...	3 0 0	13,501 11 9	13,504 11 9	13,500 11 9	4 0 0
Lakhimpur ...	Ditto ditto ...	.....	23,336 14 4	23,336 14 4	23,321 14 4	15 0 0
Nága Hills ...	Ditto ditto ...	.....	516 10 8	516 10 8	516 10 8	.....
Khási and Jaintia Hills.	Ditto ditto ...	.....	1,957 15 6	1,957 15 6	1,957 15 6	.....
Gáro Hills ...	Ditto ditto ...	11,728 0 3	39,030 8 7	50,758 8 10	41,838 10 7	8,919 14 3
	Total	76,195 5 8	2,95,659 6 4	3,71,854 12 0	3,26,793 2 9	45,061 9 3

FORM No. 61.

Forest Department, Assam.—Outstandings and Liabilities on Account of Contractors and Disbursers for 1890-91.

Division	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year	To Department (Outstandings).	By Department (Liabilities).
	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction ..	.....	2,247 13 3	2,247 13 3	449 13 3	1,938 0 0	2,387 13 3	140 0 0	.....
Working Plans ..	.....	7,546 11 4	7,546 11 4	2,428 2 7	6,211 9 10	8,640 12 5	1,309 1 1	....
Cachar ..	.....	4,070 1 6	4,070 1 6	336 6 6	4,354 1 3	4,690 7 9	620 6 3	.....
Sylhet ..	.....	14,988 11 3	14,988 11 3	166 14 0	15,174 14 6	15,341 12 6	353 1 3	.....
Goálpára ..	.....	30,745 7 6	30,745 7 6	359 11 10	32,290 15 2	32,650 11 0	1,905 3 6	.....
Kámrúp ..	.....	19,708 11 3	19,708 11 3	1,064 7 7	19,336 2 0	20,400 9 7	696 14 4	.....
Darrang ..	.....	7,467 6 4	7,467 6 4	406 1 1	7,655 2 11	8,061 4 0	593 12 8	.....
Nowgong ..	.....	2,011 0 7	2,011 0 7	448 0 10	1,899 4 6	2,347 5 4	336 4 9	....
Sibságar ..	0	8,743 5 1	8,743 5 1	792 10 8	8,646 15 10	9,439 10 6	696 5 5	.....
Lakhimpur ..	63 1	11,529 9 10	11,592 10 10	98 3 11	12,056 4 6	12,154 8 5	334 7 9	72 10 2
Nága Hills ..	.....	.....	.....	.....	.....	.....	.....	.....
Khási and Jaintia Hills.	.....	.....	.....	.....	.....	.....	.....	.....
Gáro Hills ..	.....	19,400 0 1	19,400 0 1	946 10 10	22,084 11 2	23,031 6 0	3,631 5 11	.....
Total	63 1 0	1,28,547 14 0	1,28,610 15 0	7,508 3 1	1,31,647 1 8	1,39,155 4 9	10,616 15 11	72 10 2

Calcutta,

The 16th June 1891.

I. C. Bose,

Assistant Comptroller General, Forests.

FORM No. 62.

Forest Department, Assam.—Financial Results of the year 1890-91.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	242	14,357	15,411	242	29,768
Working Plans	.....	.....	7	5,890	16,107	7	21,997
Cachar	189	42	37,761	7,172	8,737	37,950	15,951
Sylhet	257	11	39,808	5,934	4,415	40,065	10,360
Goálpára	2,621	3,733	70,383	10,915	39,762	73,004	54,410
Kámrúp	335	3,663	53,732	10,250	22,437	54,066	36,350
Darrang	93	14	29,618	4,696	16,475	29,711	21,185
Nowgong	468	9	10,143	2,538	5,507	10,611	8,054
Sibságar	788	299	12,713	7,169	8,651	13,501	16,119
Lakhimpur	65	.....	23,257	24,179	16,025	23,322	40,204
Nága Hills	.....	.....	517	.....	....	517	.....
Khási and Jaintia Hills ...	.....	....:	1,958	497	2,486	1,958	2,983
Gáro Hills	1,692	496	40,147	10,424	15,552	41,839	26,472
Total	6,508	8,267	3,20,284	1,04,021	1,71,665	3,26,793	2,83,853

J. T. Jellicoe,

Offg. Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam during 1890-91.

Date of entry.	Name of reserve.	Civil district and subdivision of district.	Number and date of Notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
4th June 1890	Dibru reserve	District Lakhimpur, Parapara mauza.	No. 1790R., dated the 4th June 1890.	56,189	*North.*—The Brahmaputra river from the Mahmari and Sabru Jan in the west, to the Kerwa Jan in the east; thence the latter stream to its junction with the Lika Jan; thence the latter stream to point A, where it approaches closest to the Buri Dangari nadi, as marked on the map. *East and South.*—A short survey line from point A on the Lika Jan to point B on the Buri Dangari nadi, where these are closest together, as marked on the map; and thence down the latter stream to its junction with the Dangari nadi, and down this stream to its junction with the Dibru nadi, and down the latter stream to its junction with the Gurung Jan, and along the latter to the Parapara Jan, until its junction with the Dibru nadi, and along the latter to its junction with the Sabru Jan. *West.*—The Sabru Jan from its junction with the Dibru nadi to its junction with the Mahmari Jan, and the latter stream to its junction with the Brahmaputra.	.....	
18th August 1890	Second addition to the Bijni reserve	District Goálpára, Bijni Duar	No. 2736R., dated the 18th August 1890.	22,540	*North.*—The Bhutan boundary from the Kanamukra river in the west to the Pakajanee nadi or western boundary of the present Bijni reserve in the east. *East.*—The western boundary of the present Bijni reserve. *South.*—A straight line in continuation of southern boundary of the present Bijni reserve from the Daichang nadi in the east to the Kanamukra river in the west. *West.*—The west or right bank of the Kanamukra river from the western end of the southern boundary to the Bhutan boundary.	.....	
Ditto ...	Addition to the Barak reserve	District Cachar, Bouraj	No. 2737R., dated the 18th August 1890.	3,840	*West.*—The base of the Bhuban range from the exit of the Bhuban khál in the south to the Mankush grant in the north. *North.*—The boundary of the Mankush grant. *East and South.*—The boundary of the present Barak reserve.	.....	

Appendix IA.

Register of Protected Forests in the Province of Assam during 1890-91.

Date of entry.	Name of protected forest.	Civil district and subdivision of district.	Number and date of Notification.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
19th September 1890	Makum protected forest.	Lakhimpur district, Makum mauza.	No. 3143R., dated the 19th September 1890.	2,644	*North.*—A survey line running parallel with the Dehing river and half a mile south of it from the Makum Pani in the west to the Namdang Pani in the east. *East.*—The Namdang Pani from the eastern extremity of the northern boundary to its junction with the Hamukjan, thence up the latter stream to point H at the foot of the hills as shown in the map filed in the Assam Secretariat. *South.*—A demarcated survey line along the foot of the hills from point H on the Hamukjan to point G on the Namdang Pani and, thence to point C on the Makum Pani as shown in the map. *West.*—The Makum Pani from point C to the western extremity of the northern boundary.	The only rights existing are those to which the Assam Railways and Trading Company are entitled under the Indentures dated respectively the 30th July 1881 and the 16th December 1882, commonly spoken of as the coal concession and the oil concession, both of which end on the 1st of October 1901.	

Appendix II.

Statement showing the clearing of Boundary Lines and repairing of Boundary Mounds and the inspection done by the Divisional Officer in each Forest Division in 1890-91.

Divisions.	Total length of artificial boundaries and demarcated natural boundaries.	Length of artificial boundaries and demarcated natural boundaries cleared in 1890-91.	Total number of boundary mounds.	Number of boundary mounds repaired in 1890-91.	Length of artificial boundaries and demarcated natural boundaries inspected by the divisional officer.	Average cost per running mile of boundary work.	
						1890-91.	1889-90.
	Miles.	Miles.			Miles.	Rs. a. p.	Rs. a. p.
Cachar	73	71	690	690	69	8 2 7	8 13 9
Sylhet	9	.....	.....	.....	.....	.....	20 0 0
Goálpára	106	106	391	391	76	2 1 6	2 4 6
Kámrúp	380	380	1,759	1,759	293	2 2 6	0 11 9
Darrang	33	33	137	137	9	2 5 5	5 4 2
Nowgong	124	124	1,034	1,026	48	1 15 4	8 2 5
Sibságar	140	120	303	294	87	3 11 6	8 0 4
Lakhimpur	115	71	348	295	47	13 15 7	11 10 9
Khási and Jaintia Hills ...	.....	.....	11	1	.....	.....	.....
Gáro Hills	161	161	308	308	135	2 15 2	5 3 0
Total	1,141	1,066	4,981	4,901	764	3 9 11	3 14 5

Appendix III.

KULSI PLANTATION MEMORANDUM.

Counting and Measurement of Trees of the different Species, details of Expenditure incurred, and Table showing the Rainfall in 1890-91.

RUBBER PLANTATION.

EASTERN BLOCK 1873-77.

Area, 88 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet
100	53	4

The measurements of the largest and finest are :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	60	4	8
2	61	7	3
3	64	9	9
4	63	3	9
5	64	7	7
6	59	4	0
7	61	6	7½
8	60	3	1
9	58	4	7
10	62	4	10

This block was divided into four compartments, the result of countings in each compartment is as follows :

No. of compartment.	Number alive.	Number of vacancies.	Total.
1	398	11	409
2	735	8	743
3	840	5	845
4	444	10	454
Total ...	2,417	34	2,451

Fifty of the Tun or Poma trees in this block were also measured, and the average size of them is given below :

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	51	1	4½

The measurements of the ten largest are :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	54	2	3
2	53	2	5½
3	60	2	10
4	57	2	2½
5	55	2	0¾
6	47	1	9¼
7	50	1	10¾
8	51	2	3
9	48	2	1
10	44	1	9½

These trees were sown in 1878. There are 226 planted bamboo clumps in this block. Expenditure was Rs. 57-9-6.

WESTERN BLOCK.

COMPARTMENT 1878.

Area 13 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	63	5	11

The following are amongst the finest and largest trees :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	67	4	9
2	66	5	1
3	67	10	3
4	65	5	2
5	75	4	5
6	59	8	4
7	58	5	10
8	60	6	5½
9	59	6	8½
10	61	8	2

Number alive.	Number of vacancies.	Total.
420	4	424

In this compartment there are 130 bamboo clumps, of which 119 are Jati, 2 Makal or Deo, and 9 Bhaluka. Expenditure was Rs. 9.

COMPARTMENT 1883.

Area, 25·45 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	45	2	5

The ten largest and finest measured as follows :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	46	3	2½
2	51	5	3
3	48	4	0
4	52	2	9½
5	49	3	6½
6	43	3	8
7	43	2	10
8	44	4	6½
9	42	5	8½
10	32	2	4

Number alive.	Number of vacancies.	Total.
1,146	20	1,166

There are 380 bamboo clumps in the compartment, and 3 Ceara Rubber trees of an average height of 36 feet and girth of 1 foot 5 inches.

Expenditure was Rs. 34-3.

COMPARTMENT 1884.

Area, 33·40 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.
50	34	2

The measurements noted below are those of the finest in this compartment, *viz.* :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	36	2	7
2	32	2	4
3	38	2	2½
4	34	1	8
5	38	2	3
6	35	2	2
7	38	2	5½
8	33	2	4
9	31	2	3
10	33	2	1

Number alive.	Number of vacancies.	Total.
1,832	51	1,883

There are eleven Ajhar seed beds, with an average length of 290 feet, width 4 feet.
These plants are averaging 21 feet in height and 6 inches in girth.
Expenditure was Rs. 86-1-9.

TEAK PLANTATION.

COMPARTMENT 1872.

Area 8·75 acres.

Number of dominant trees measured.	Average girth. Feet.	Inches.
50	3	6½

The following are amongst the finest and largest trees :

No.	Height. Feet.	Girth. Feet.	Inches.
1	68	3	10½
2	78	2	8¾
3	81	3	4½
4	79	3	0½
5	84	2	10
6	84	3	11
7	76	3	4
8	75	4	10¾
9	77	4	2
10	80	3	6

In this compartment there are now 75 *Pithecolobium Saman* trees of an average height of 49 feet and girth of 1 foot 11 inches.

Expenditure was Rs. 9-11.

COMPARTMENT 1873.

Area, 33 acres.

Number of dominant trees measured.	Average girth. Feet.	Inches.
50	2	6½

Amongst the largest and finest are the following :

No.	Height. Feet.	Girth. Feet.	Inches.
1	81	3	4
2	72	2	9
3	79	2	8½
4	72	2	5
5	72	2	7¼
6	74	3	6
7	68	2	9
8	77	2	9¾
9	76	2	9¾
10	75	2	8¾

There are also a number of *Pithecolobium Saman* trees in this compartment of an average height of 51 feet, and girth of 2 feet 2 inches.

Expenditure was Rs. 11-8.

COMPARTMENT 1874.

Area, 17·68 acres.

Number of dominant trees measured.	Average girth. Feet.	Inches.
50	3	0½

The following are amongst the best :

No.	Height. Feet.	Girth. Feet.	Inches.
1	72	3	9
2	78	3	5¾
3	77	3	4
4	72	3	2¼
5	75	4	0
6	84	4	2
7	83	3	9
8	80	3	9½
9	82	3	9
10	84	4	7¾

There are also two clumps of *Musa Textilis :*

Expenditure was 7 annas.

COMPARTMENT 1875.

Area, 60·6 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Inches.
50	80	2	8

The following are amongst the best :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	85	3	10
2	87	3	8
3	84	3	11½
4	82	5	0
5	90	3	9
6	95	3	10
7	88	4	1½
8	83	3	8
9	75	3	7
10	74	4	10

There are numerous Sam seedlings, also some Nahor and Ajhar plants.
Expenditure was Rs. 1-4-0.

COMPARTMENT 1878.

Area, 20·90 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches
50	71	2	4

The following are the finest and largest :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	75	2	10½
2	71	3	11½
3	75	3	5
4	71	2	7
5	76	2	8
6	70	2	4½
7	68	2	10
8	69	2	6
9	69	2	4¼
10	70	2	4

In this compartment there are also a number of Ajhar and Amari plants.
Expenditure was Rs. 13-10-6.

COMPARTMENT 1879.

Area, 10·0 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	59	1	7¼

The following ten trees are the finest and largest

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	55	1	9
2	59	2	1½
3	61	1	10
4	61	1	10¾
5	63	2	1¾
6	59	2	0½
7	57	2	2
8	61	2	0
9	56	2	0¼
10	58	1	10½

Another fifty trees in this compartment gave the following measurements :

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	48	1	9

The following are the finest and largest :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	60	2	5½
2	63	2	8¾
3	45	1	7
4	40	1	4½
5	45	1	8
6	46	1	4¾
7	50	1	6
8	47	1	6½
9	46	1	4
10	44	1	5¾

There is only one Ceara Rubber tree left alive, of 68 feet in height and 11 inches in girth.
No *Pithecolobium* trees are alive at present in this compartment.
Expenditure was 12 annas.

COMPARTMENT 1881.

Area, 20 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	59	1	8¾

The following are the best and largest in this compartment :

No.	Height. Feet.	Girth. Feet.	Girth. Inches
1	60	1	11
2	61	2	2
3	57	1	10
4	59	1	10
5	61	2	2½
6	60	2	0½
7	66	2	8½
8	55	2	5½
9	59	2	5½
10	58	2	4½

The following trees are also found in this compartment, *viz.*, 200 *Pithecolobium Saman* trees of n average height of 56 feet and girth of 2 feet and 10¼ inches, which were planted along both sides f the Hathigarh and Chanchalpara district road.

The Sisu trees measured as follows :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	36	1	0¼
2	41	1	3
3	23	0	9½
4	42	1	2½
5	36	0	11½
6	32	0	10
7	35	1	0
8	34	0	10¾
9	34	0	11½
10	37	1	2

The Ajhar trees were also measured and gave the following results :

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	35	1	5½
2	31	1	0¼
3	33	1	2¾
4	33	1	0½
5	35	1	1
6	28	1	0
7	35	1	5½
8	36	1	2
9	36	1	2
10	34	0	11½

There are now 79 Khoir trees, ten of these were measured as follows :

No.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	41	1	4½
2	35	0	11
3	32	0	9¼
4	33	0	11½
5	38	1	0
6	51	1	9½
7	47	2	0
8	51	1	7¾
9	25	0	7½
10	17	0	6

Besides the above, there are some *Sonaru* (*Cassia Fistula*) and *Sam* (*Artocarpus Chaplasha*) trees.

Expenditure was Re. 1-6.

Sisu Plantation, 1873.

Area, 20 acres.

Number of dominant trees measured.	Average height.	Average girth.	
	Feet.	Feet.	Inches.
50	53	1	11½

The following ten are the best trees :

No.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	52	2	1
2	51	2	4½
3	59	2	7
4	58	2	9
5	60	2	11½
6	53	2	3
7	54	2	7½
8	49	2	11¼
9	53	2	4¾
10	50	2	6½

The Tun trees in this plantation were also measured.

Number of dominant trees measured.	Height.	Girth.	
	Feet.	Feet.	Inches.
50	57	3	2½

Amongst the best are the following :

No.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	57	3	9
2	61	3	10
3	58	3	1
4	56	2	3½
5	58	2	9
6	61	3	9
7	60	2	10
8	58	2	9
9	58	2	9
10	52	2	10

In this compartment there are also 91 Ajhar seed beds, average 267 feet in length and 4 feet in width.

The size of the best tree is 20 feet in height and 11 inches in girth.

Expenditure was Rs. 29-6.

Khair Plantation, 1889.

Area, 12 acres.

This plantation appears to be a success. The seedlings are from 3 feet to 4 feet high.
Rs. 198 was spent in keeping this plantation free of jungle and in planting up vacancies.

Bamboo Plantation, 1882.

Area, 2 acres.

There are now 227 clumps of bamboos of the following species, *viz.*,—

Jati	204
Jao	17
Bijuli	6
Total	227

The average number of bamboos in each clump is 82, 16, and 5 of each kind respectively.
The total number of bamboos cut for departmental use is as follows :

Jati	340
Total	340

There was no expenditure during the year in this compartment.

Cinchona Plantation, 1885.

Compartment No 1.

There are only 32 trees alive, the average height of these trees is 8 feet and girth 1¾ inches.
The size of the best one is 9 feet in height and 1¾ inches in girth.
There are also 2 Ceara Rubber trees, averaging 31 and 33 feet in height and 1 foot and 11¼ inches in girth respectively.
Expenditure was Rs. 8-2.

Jubilee Plantation.

Area, 2 acres.

This is the smallest plot planted with different kinds of bamboo, canes, and Nahor trees, &c.; and 16 Rubber creepers (received from Upper Assam) were planted in this plot, out of which 13 creepers are left alive.
Expenditure was Rs. 6-12-6.

Nurseries.

The following are the results of the countings made in the different Rubber nurseries, *viz.*:

Rubber No. 1	21
Ditto 2	184
Ditto 3	2,969
Total	3,174

Expenditure was 1 anna only.

Miscellaneous.

Bungalow Hill.

The two Maipak trees now measure 65 and 70 feet in height, and have girths of 2 feet 1½ inches and 3 feet 6 inches respectively.
There are also 11 *Pithecolobium Saman* trees of an average height of 53 feet and girth of 3 feet 11 inches, and 4 Ceara Rubber trees, of which the best one is of 55 feet in height and 2 feet 5½ inches in girth. Of the *Castiloa Elastica* plants, only one is alive and 13 *Landolphia*.
There are 54 *Pithecolobium Saman* trees at Rajapara, averaging a height of 12 feet and girth of 1 foot 8 inches.
There are 74 Rubber trees and 60 Bhaluka bamboos planted alongside the district road.
The expenditure was Rs. 11-7.
Here (along the new inspection path) 26 Rubber creepers (received from Upper Assam) were planted ; out of which 19 creepers are only alive.

The expenditure on plantation work at Kulsi during the year was :

	Rs.	a.	p.
1. Rubber—			
Old, or eastern block, 88 acres	57	9	6
New, or western „ 71 „	129	4	9
2. Teak 168 „	38	10	6
3. Sisu	29	6	0
4. Khoir	198	4	0
5. Experiments and exotics	50	7	6
6. Cinchona	8	2	0
7. Arbari jhúm cultivation	6	1	0
8. Establishment	256	8	0
Grand total as per summary	774	5	3

Table of rainfall at Kulsi plantation.

	1889-90.	1890-91.
April	8·60	7·31
May	10·35	6·05
June	26·06	10·89
July	11·62	16·04
August	11·58	8·45
September	12·22	2·70
October	1·58	1·84
November	0·50	.....
December	.....	.....
January	0·45	0·10
February	.....	1·60
March	0·85	1·80
Total	83·81	56 78

D. P. Copeland,

Deputy Conservator of Forests, Kámrúp Division.

Appendix IV.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

MEASUREMENTS AND COUNTINGS OF TREES.

Compartment No.	Between 5 and 10 feet.	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet.	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Above 50 feet.	Vacancies.	Total.	Remarks.
1	...	3	7	54	217	282	318	195	107	62	3	1,248	1 washed away by the Mansiri nadi.
2	...	4	33	118	241	320	253	136	80	66	5	1,256	5 ditto ditto.
3	...	...	26	71	152	203	199	121	88	94	25	979	
4	...	3	22	85	263	514	518	212	139	185	19	1,960	3 ditto ditto.
5	...	5	48	153	434	527	364	190	115	65	23	1,924	
6	...	5	37	136	222	265	255	138	55	15	22	1,150	
7	...	1	8	45	74	153	332	277	129	45	26	1,090	
8	...	2	11	44	129	321	244	144	90	24	21	1,030	
9	...	4	29	106	206	273	231	118	22	...	26	1,015	
10	...	...	12	24	121	288	282	94	6	...	9	836	
11	...	22	148	312	355	377	333	98	13	...	21	1,639	
12	...	59	287	442	230	63	...	...	...	...	35	1,116	
13	...	17	48	87	195	136	22	...	...	...	2	507	
14	...	28	183	417	469	215	50	...	...	...	7	1,369	
Total, April 1891...	...	153	899	2,094	3,308	3,897	3,401	1,723	844	556	244	17,119	9 washed away by the Mansiri nadi.
" " 1890...	...	404	1,149	2,326	3,545	3,986	3,108	1,333	598	437	242	17,128	
" " 1889...	17	357	1,263	3,101	4,495	3,441	1,817	706	341	415	76	16,019	
BAMONI HILL PLANTATION.													
Total, April 1891...	2	14	11	11	21	68	95	151	170	250	1	794	
" " 1890...	3	7	14	25	33	45	134	186	196	148	3	794	
" " 1889...	4	10	20	49	62	94	266	138	87	71	2	794	

Height and girth of fifty Rubber trees measured in each year's plantation since 1874-75.

Year when planted.	1888-89.				1889-90.				1890-91.			
	Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.	
	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
CHARDUAR.												
1874-75	61	11	11	5	60	....	12	2	66	9	13	8
1875-76	57	6	7	10	61	5	9	2	64	9	9	10
1876-77	55	10	7	5	61	2	8	2	63	10	9	1
1877-78	53	9	5	11	57	....	6	8	60	9	7	9
1878-79	46	2	4	6	49	5	5	9	52	3	6	11
1879-80	44	....	5	2	48	5	5	8	52	1	6	7
1880-81	38	7	4	2	43	4	4	10	46	10	4	10
BAMONI HILL.												
1874-75	47	3	10	10	55	5	12	5	58	10	14	2

Condition of Nurseries at the end of 1890-91.

Compartment No.	Area in acres.	Number of seedlings.	Height. Greatest.	Height. Average.	Height. Least.
Old nursery, compartment 2 ...	5·34	5,348	40′ 6″	17′ 10″	1′ 6″
New " " 2 ...	·42	4,684	29′ 0	15′ 0	3′ 6″
Old " " 3 ...	4·08	23,560	37′ 0	14′ 3	2′ 0
New " " 3 ...	·39	3,828	28′ 0	16′ 0	4′ 0
Nursery in compartment 9 ...	4·13	13,442	38′ 0	15′ 9″	3′ 0
Ditto ditto 10 ...	9·36	19,970	32′ 0	12′ 3″	2′ 0
Total	23·72	70,832			

Details of Expenditure in the Charduar Caoutchouc Plantation during 1890-91 compared with the two previous years.

Particulars.	1888-89.			1889-90.			1890-91.		
	Amount.			Amount.			Amount.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1. Establishment	36	6	6	89	8	11	150	0	0
2. Plantation fence (including guards for nurseries).	511	0	0	534	12	0	706	14	0
3. Collection, carriage, sowing, and transplanting of various seedlings.	26	5	0	20	0	0	.....		
4. Clearing lines, removing of trees and stumps, repairing of mound, renewing stakes and levelling path.	1,643	5	0	1,574	12	0	2,067	3	0
5. Nurseries, fencing, weeding, drainage, &c. ...	11	10	0	5	0	0	1	0	0
6. Pruning of trees in lines	.....			6	16	0	.....		
7. Planting out Rubber trees A 382, B 242, and C 367.	A 70	13	0	B 15	8	0	C 96	6	0
8. Miscellaneous	13	11	0	45	14	0	41	14	0
9. Cost of compartment 12, new opening ..	316	2	0	715	2	0	165	11	0
10. Repairing plantation buildings	8	0	0	.....			9	4	0
11. Cost of compartment 15, opening ...	17	10	0	2,668	0	0	1,516	7	0
12. Expenditure on plantation road... ...	22	8	0	.....			122	6	0
13. Weeding and clearing Nahor, Sam, Amari, and other seedlings in compartment.	5	11	0	4	11	0	.....		
14. Cost of corduroyed road between compartments 13 and 14.	1	2	0	1	8	0	.....		
15. Cost of compartment 16, new opening ...	.....			3,289	3	0	5,212	0	0
Total	2,684	3	0	8,970	8	11	10,089	1	0

Rainfall at the Charduar Caoutchouc Plantation for the year 1890-91, compared with the last two years.

Month.	Rainfall.		
	1888-89.	1889-90.	1890-91.
April	7·11	4·73	8·21
May	9·26	12·14	4·39
June	23·22	19·20	16·82
July	15·67	14·69	17·63
August	9·31	15·69	14·60
September	14·55	13·36	12·16
October	3·27	4·23	9·18
November	0·27	.....	0·51
December	0·20	0·24	5·53
January	0·61	0·78	0·51
February	1·80	.....	0·25
March	1·91	0·44	2·22
Total	87·17	85·50	92·01

W. F. Lloyd,

Assistant Conservator of Forests, Darrang Division.

Appendix V.

Statement of Forest Produce granted free during 1890-91.

Description of forest produce.	Cachar Division.		Sylhet Division.		Goálpára Division.		Kámrúp Division.		Darrang Division.		Nowgong Division.		Sibságar Division.		Lakhimpur Division.		Khási Hills Division.		Gáro Hills Division.	
	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.
(a) *To right holders.*		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
I.—Timber ... ... } *Gurkatí permits.*																				
II.—Firewood ... ... } *Gurkatí permits.*	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	15	30
III.—Minor forest produce ... } *Gurkatí permits.*																				
(b) *Under concessions granted by the Local Government.*																				
I.—Timber	8,284	258	23,108	1,457	65,906	4,406	11,620	1,300	1,36,280	13,590	33,880	3,388	1,88,340	18,852	21,480	2,204	.....	...	720	240
Ia.—Bamboos (number)	67,100	168	1,458,230	3,651	.....	...	26,650	266	40,812	408	19,550	195	98,442	984	19,900	268	.....	...	.....	...
II.—Firewood	60,480	945	744,904	11,639	190,954	2,983	17,400	272	264,384	524	65,530	1,024	574,014	8,969	2,048	32	.....	...	.....	...
III.—Minor forest produce... ...	.....	210	.....	4,731	.....	31	.....	4	.....	74	.....	14	.....	94	.....	29	.....	...	.....	...
IV.—Grass, grazing and leaf fodder ...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
V.—Branches, leaves and vegetable mould for manuring purposes.	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
Total	.....	1,581	.....	21,478	.....	7,420	.....	1,842	.....	14,596	.....	4,621	.....	28,899	.....	2,533	.....	...	.....	240
(c) *By free grants under executive orders.*																				
I.—Timber	.....	...	.....	...	64,880	2,617	15,165	1,752	700	168	1,180	59	.....	...	.....	...	.....	...	.....	...
Ia.—Bamboos (number)	.....	...	.....	...	3,380	34	88,450	884	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
II.—Firewood...	.....	...	.....	...	329,340	5,146	197,400	3,084	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
III.—Minor forest produce ...	.....	...	.....	...	.....	...	.....	20	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
IV.—Grass, grazing, and leaf fodder ...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
V.—Branches, leaves and vegetable mould for manuring purposes. ...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
Total	.....	...	.....	...	.....	7,797	.....	5,740	.....	168	.....	59	.....	...	.....	...	.....	...	.....	...
Grand total	.....	1,581	.....	21,478	.....	15,217	.....	7,582	.....	14,764	.....	4,680	.....	28,899	.....	2,533	.....	...	.....	270

Appendix VI.

Forest Produce exported from, and remaining in, the district of Cachar at the close of 1890-91.

SONAI AND SYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Sonai revenue station.			Quantity of forest produce which had passed the Sonai revenue station and was again checked at Syaltek revenue station.			Amount of forest produce which remained in the district at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	7,246	13,144	20,390	4,798	8,812	13,610	2,448	4,332	6,780
Agar	.....	177	177	.....	.....	.....	.....	177	177
Posts and planks	4	.....	4	64	94	158	.....	.....	.....
Poles	117	.....	117	10	.....	10	107	.....	107
Bamboos	835,675	61,840	897,515	529,370	49,710	579,080	306,305	12,130	318,435
Canes (bundles)	16,281	3,177	19,458	13,159	3,264	16,423	3,122	.....	3,122
Sun-grass and reeds (cubic feet) ...	14,767	490,635	505,402	11,275	321,564	1,294,832	3,492	169,070	172,562
Firewood	5,504	16,100	21,604	192	.....	192	5,312	16,100	21,412
Dugouts	11	27	38	.....	.....	.....	11	27	38

MATIJURI AND SYALTEK.

Logs	502	4,299	4,801	494	2,895	3,389	8	1,404	1,412
Agar	1	.....	.....	.....	.....	.....	.....	1	1
Posts and planks	.....	177	177	.....	.....	.....	.....	177	177
Poles	2	19	21	.....	.....	.....	2	19	21
Bamboos	259,100	51,181	316,281	159,620	62,456	234,427	99,480	.....	99,480
Canes	2,076	2,504	4,580	1,221	2,273	3,494	855	231	1,086
Sun-grass and reeds	830	18,713	19,543	30	14,443	14,473	800	4,270	5,070
Firewood	.....	573	573	.....	.....	.....	.....	573	573
Charcoal	.....	80	80	.....	1	1	.....	79	79

TARA KISOR GUPTA,
Sub-Assistant Conservator of Forests, Cachar Division.

Appendix VI—*continued.*

Statement showing the Trade in Forest Produce from Government, Foreign, and Private Forests in the Cachar Division in the year 1890-91.

Revenue stations.	Locality.	Logs.			Boats.			Posts and planks.			Poles.			Bamboos.		Canes.		Sun-grass and reeds.		Agar.		Firewood and charcoal.		Fees.
		Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number of baskets.	Amount.	Cubic feet.	Amount.	
				Rs. a. p.			Rs. a. p.			Rs. a. p.			Rs. a. p.		Rs. a.		Rs. a. p.		Rs. a.		Rs. a.		Rs. a. p.	Rs. a.
Sonai.	Reserved forests	3,546	105,267	9,149 14 0	..	.....	.....	5	37	8 14 3	44	176	5 8 0	582,250	1,455 10	14,205	887 12 9	5,000	12 8	....	.....	2,688	42 0 0	357 8
	Unclassed State forests and waste lands.	1,703	56,458	5,415 5 0	10	300	60 0 0	..	..	.....	72	288	9 0 0	196,525	492 5	1,682	105 2 0	23,968	82 0	....	.....	2,524	39 7 0	154 0
	Total Government forests ..	5,249	161,725	14,565 3 0	10	300	60 0 0	5	37	8 14 3	116	464	14 8 0	779,175	1,947 15	15,887	992 14 9	28,968	94 8	....	.....	5,212	81 7 0	511 8
	Foreign forests	1,881	57,514	4,364 3 0	1	30	6 0 0	..	..	.....	1	4	0 2 0	60,350	150 14	451	28 3 0	....	.....	....	.....	102	1 9 6	61 0
	Private "	13,144	246,533	.....	27	810	.....	..	..	.....	..	..	.....	61,840	.....	3,177	.....	490,635	.....	177	.....	16,100	.....	.....
	Total Sonai	20,274	466,172	18,929 6 0	38	1,140	66 0 0	5	37	8 14 3	117	468	14 10 0	907,365	2,098 13	19,515	1,021 1 9	519,603	94 8	177	.....	21,414	83 0 6	572 8
Matijuri.	Reserved forests	502	18,083	1,763 7 0	..	.....	.....	..	..	.....	2	8	0 4 0	213,400	533 8	1,876	117 4 6	....	.....	....	.....	....	.....	105 8
	Unclassed State forests and waste lands.	76	2,394	419 5 0	..	.....	.....	..	..	.....	..	..	.....	40,725	101 13	225	14 1 0	3,000	7 8	....	.....	....	.....	20 0
	Total Government forests ..	578	20,477	2,182 12 0	..	.....	.....	..	..	.....	2	8	0 4 0	254,125	635 5	2,101	131 5 6	3,000	7 8	....	.....	....	.....	125 8
	Foreign forests	..	.....	.....	..	.....	.....	..	..	.....	..	..	.....	.....	.....	.....	.....	.....	.....	....	.....	....	.....	.....
	Private "	4,299	88,419	.....	..	.....	.....	177	216	.....	19	76	.....	57,181	.....	2,504	.....	18,713	.....	2	.....	653	.....	.....
	Total Matijuri	4,877	108,896	2,182 12 0	..	.....	.....	177	216	.....	21	84	0 4 0	311,306	635 5	4,605	131 5 6	21,713	7 8	2	.....	653	.....	125 8
North Cachar.	Protected forests	180	5,400	640 0 0	..	.....	.....	..	..	.....	..	..	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....	.....
	Total North Cachar ..	180	5,400	640 0 0	..	.....	.....	..	..	.....	..	..	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....	.....
Syaltek.	Unclassed State forests and waste lands.	737	19,485	1,651 10 0	5	150	30 0 0	424	1,033	83 7 0	295	1,180	36 14 0	168,325	420 13	437	27 5 6	....	.....	....	.....	2,491	38 14 9	154 0
	Total unclassed State forests and waste lands.	737	19,485	1,651 10 0	5	150	30 0 0	424	1,033	83 7 0	295	1,180	36 14 0	168,325	420 13	437	27 5 6	....	.....	....	.....	2,491	38 14 9	154 0
	Foreign forests	..	.....	.....	..	.....	.....	..	..	.....	..	..	.....	.....	.....	.....	.....	.....	.....	....	.....	....	.....	.....
	Private "	527	12,270	.....	..	.....	.....	..	..	.....	..	..	.....	24,362	.....	1,066	.....	46,390	.....	132	.....	....	.....	.....
	Total Syaltek	1,264	31,755	1,651 10 0	5	150	30 0 0	424	1,033	83 7 0	295	1,180	36 14 0	192,687	420 13	1,503	27 5 6	46,390	.....	132	333 0	2,491	38 14 9	154 0
	Grand total	26,595	612,223	23,403 12 0	43	1,290	96 0 0	606	1,286	92 5 3	433	1,732	51 12 0	1,405,358	3,154 15	25,823	1,179 12 9	587,706	102 0	311	.....	24,558	121 15 3	852 0
	Add stock and value of previous year.	455	13,920	1,554 1 9	1	30	6 0 0	88	352	27 8 0	72	288	9 0 0	6,150	38 6	.....	.....	....	.....	....	.....	1,288	20 2 0	18 0*
	Total	27,050	626,143	24,957 13 9	44	1,320	102 0 0	694	1,638	119 13 3	505	2,020	60 12 0	1,411,508	3,193 5	25,823	1,179 12 9	587,706	102 0	....	.....	25,846	142 1 3	870 0
	Deduct stock and value at the close of 1890-91. ..	401	10,861	1,243 12 9	1	30	6 0 0	124	549	44 14 9	87	348	10 14 0	4,150	10 6	.....	.....	....	.....	....	.....	1,098	17 2 6	15 0
	Net result	26,649	615,282	23,714 1 0	43	1,290	96 0 0	560	1,089	74 14 6	418	1,672	49 14 0	1,407,358	3,182 15	25,823	1,179 12 9	587,706	102 0	....	.....	24,748	124 14 9	855 0
	Government forests ..	6,778	209,164	19,141 14 0	15	450	90 0 0	383	873	74 14 6	398	1,592	49 12 0	1,203,625	3,052 1	18,425	1,161 9 9	31,968	102 0	....	.....	7,893	123 5 3	791 0
	Foreign " ..	1,906	58,896	4,572 3 0	1	30	6 0 0	..	..	.....	1	4	0 2 0	60,350	150 14	451	28 3 0	....	.....	....	.....	102	1 9 6	63 0
	Private " ..	17,970	347,222	.....	27	810	.....	177	216	.....	19	76	.....	146,382	.....	6,747	.....	555,738	.....	311	.....	16,753	.....	.....

* One rupee has been written off.

TARA KISOR GUPTA,

Sub-Assistant Conservator of Forests, in charge, Cachar Division.

Appendix VI—*continued.*

Statement showing the increase and decrease in Forest Produce from the Government, Foreign, and Private Forests in the Cachar Division during 1890-91 as compared with 1889-90.

Description of forest produce.	Government forests.								Foreign forests.								Private forests.			
	1889-90.			1890-91.			Increase.	Decrease.	1889-90.			1890-91.			Increase.	Decrease.	1889-90.	1890-91.	Increase.	Decrease.
	Royalty paid.	Royalty outstanding	Total.	Royalty paid.	Royalty outstanding.	Total.			Duty paid.	Duty outstanding	Total.	Duty paid.	Duty outstanding.	Total.						
	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Logs (No.) ...	10,864	410	11,274	6,773	371	7,144	....	4,130	2,797	45	2,842	1,906	30	1,936	...	906	10,218	17,970	7,752	.....
Agar (baskets) ...	66	...	66	.....	.....	.....	.....	66	.....	...	.....	.....	...	.....	...	...	134	311	177	.....
Posts and planks (No.) ...	301	78	379	383	124	507	128	.....	28	10	38	.....	10	10	...	28	8,766	177	.....	8,589
Bamboos (No.) ...	9,77,624	5,400	9,83,024	12,03,675	3,400	12,07,025	2,24,001	.....	41,325	750	42,075	60,350	750	61,100	19,025	...	2,80,501	1,43,383	.....	1,37,118
Canes (bundles) ...	18,889	...	18,889	18,425	.....	18,425	.....	464	153	...	153	451	...	451	297	...	7,368	6,747	.....	621
Sun-grass and reeds (bundles)	57,772	...	57,772	31,968	.....	31,968	.....	25,804	.....	...	.....	.....	...	.....	...	...	21,33,257	5,55,738	...	15,77,499
c.ft. ...	4,562	1,228	5,790	7,893	1,058	8,951	3,161	.....	218	60	278	102	40	142	...	136	6,632	16,753	10,121	.....
Firewood and charcoal (c.ft.)	.....	...	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	...	.....	...	...	.....	.....	.....	.....
Dugouts (No.) ...	333	1	334	15	1	16	.....	318	.....	...	.....	1	...	.....	...	...	2	27	25	.....
Poles (No.) ...	578	72	650	398	87	485	.....	165		...	3	1	...	.....	...	2	4	19	15	.....

TARA KISHOR GUPTA,

Sub-Assistant Conservator of Forests, Cachar Division.

Appendix VI—*continued.*

Forest Produce passed at Patharkandi, Kanairghát, Habiganj and South Sylhet during each month 1890-91.

Patharkandi.

Month.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Patl.	Firewood.	Dugouts.	Amount realised.
											Rs. a. p.
April ..	87	..	103	19,450	289	13,787	..	....	104	..	211 10 0
May ..	304	..	..	60,725	128	5,138	104	21,000	704	..	621 2 0
June ..	244	..	..	123,900	80	18,124	..	700	32	..	927 6 0
July ..	550	..	8	48,500	860	408	..	....	..	..	1,141 10 0
August ..	502	1	31	39,130	825	717	2	2,900	64	..	1,397 2 6
September	380	..	29	128,505	888	899	113	925	20	..	1,480 6 3
October ..	390	..	33	177,050	1,761	8,602	261	6,675	38	..	1,471 7 0
November	134	..	24	73,475	1,540	1,600	21	24,050	..	..	703 4 6
December..	26	..	..	5,700	314	18,706	1	....	..	..	195 1 9
January ..	9	..	2	12,475	444	38,534	..	23,200	168	..	192 2 0
February ..	68	..	118	47,625	306	92,657	..	1,000	..	..	477 5 0
March ..	19	..	8	4,500	130	130,900	..	7,000	724	..	386 7 0
Total ..	2,637	..	337	761,060	7,564	327,092	442	94,450	1,864	..	9,205 0 6

Kanairghat.

Month.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Patl.	Firewood.	Dugouts.	Amount realised.
											Rs. a. p.
April ..	6	..	5	870	..	12	4	..	..	1	17 7 0
May ..	3	..	6	..	4	..	..	..	972	2	37 15 3
June ..	10	..	..	..	26	..	2	3,400	30	..	25 15 0
July ..	90	..	..	..	..	..	..	..	4	..	163 8 0
August ..	17	..	..	550	..	..	..	..	760	2	60 14 3
September	1	..	..	..	16	..	11	400	585	..	23 8 0
October ..	1	..	..	..	16	..	3	1,000	568	..	23 7 0
November	2	..	..	500	12	65	17	4,300	50	..	11 5 8
December..	6	..	58	800	..	..	..	..	396	11	57 5 6
January ..	..	..	..	1,000	..	..	31	..	396	..	17 8 0
February ..	1	..	20	..	..	..	3	..	548	..	24 6 0
March ..	3	..	5	3,000	38	..	18	..	570	49	65 8 3
Total ..	140	..	94	6,650	112	77	89	9,100	4,879	65	528 11 9

Habiganj.

Month.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Patl.	Firewood.	Dugouts.	Amount realised.
											Rs. a. p.
April ..	..	..	..	1,500	..	3,462	..	..	640	..	47 7 0
May ..	..	..	..	....	..	....	..	..	296	..	9 4 0
June ..	..	..	..	....	..	....	..	..	128	..	4 0 0
July ..	5	..	7	13,170	..	....	..	..	224	..	33 12 3
August ..	1	..	3	390		....	..	..	..	..	2 8 0
September	1	..	4	900	..	950	..	..	7	..	7 6 0
October ..	..	..	..	40,912	..	3,900	..	..	2	..	93 15 6
November	3	..	..	12,187	..	2,258	..	..	..	..	47 15 0
December..	..	..	1	45,950	..	22,900	..	..	..	..	85 12 3
January ..	4	..	3	14,500	..	164,013	..	..	1264	..	468 13 0
February ..	..	..	1	15,890	..	6,900	..	..	3	..	40 9 0
March ..	..	..	..	64,569	..	925	..	..	40	..	59 11 3
Total ..	14	..	19	209,968	..	443,758	..	..	2,604	..	901 1 3

South Sylhet.

Month.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Patl.	Firewood.	Dugouts.	Amount realised.
											Rs. a. p.
April ..	5	..	..	..	..	4,400	..	..	80	..	31 5 0
May ..	..	..	..	400	..	..	..	..	..	..	1 9 0
June ..	..	..	..	..	..	..	..	..	..	..	.....
July ..	19	..	..	..	..	..	..	..	196	..	23 7 0
August ..	6	..	..	..	..	2,400	..	..	20	..	8 15 6
September	11	..	18	50	..	..	..	..	64	..	33 6 6
October ..	12	..	5	..	..	12	..	..	..	..	14 2 3
November	..	..	..	150	..	26,400	..	..	..	..	66 6 0
December..	..	..	..	..	..	18,550	..	..	30	..	47 5 0
January ..	10	..	..	..	..	..	..	..	..	..	43 0 0
February ..	..	..	..	400	..	15	..	..	..	..	1 7 6
March ..	..	..	42	..	..	..	..	..	25	..	16 0 6
Total ..	65	..	65	1,000	..	51,777	..	..	325	..	286 7 3

TARA KISOR GUPTA,

Sub-Assistant Conservator, Sylhet Division.

Appendix VI—*concluded.*

Statement showing the Forest Produce removed from the Government, Foreign, and Private Forests in the Sylhet Division, 1890-91.

Revenue district.	Locality.	Logs.			Agar.		Posts and planks.			Poles.			Dugouts.			Bamboos.		Canes.		Pathi.		Sun-grass and reeds.		Firewood.	
		Number.	Cubic feet.	Amount.	Baskets.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Bundles.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Maunds.	Amount.
				Rs. a. p.		As.			Rs. a. p.			Rs. a.					Rs. a.		Rs. a.		Rs. a. p.		Rs. a. p.		Rs. a. p.
Pathárkandi.	Government .. Reserved ..	2,134	40,028	4,077 12 0	1	12	218	292	46 14 3	439	1,756	54 14	..	..	..	461,580	1,154 10	4,306	269 4	78,850	49 4 6	271,145	684 14 6	1,408	43 10 3
	Government .. Protected ..	563	14,196	1,416 9 0	....	....	130	192	40 5 3	3	12	0 6	..	..	..	299,475	748 11	3,250	203 2	15,600	9 12 0	55,947	389 14 9	456	14 5 0
	Total	2,697	54,224	5,494 5 0	1	12	348	484	87 3 6	442	1,768	55 4	..	..	..	761,055	1,903 5	7,556	472 6	94,450	59 0 6	327,092	1,074 13 3	1,864	57 15 3
	Foreign	3,434	105,352	.....	....	....	76	152	.....	32	128	....	..	..	..	926,100	.....	7,550	....	20,000	....	13,060	.....	20	.....
	Private	416	9,138	.....	....	....	30	67	.....	..	..	....	..	..	..	432,275	.....	323	....	....	....	97,800	.....	7	.....
	Total	3,850	114,490	.....	....	....	106	219	.....	32	128	....	..	..	..	1,358,375	.....	7,873	....	20,000	....	110,860	.....	27	.....
Kanaighát.	Unclassed State forests and waste lands	140	3,742	266 3 0	....	....	94	219	16 14 3	83	256	11 2	65	472	50	6,650	11 10	128	8 0	9,100	5 11 0	77	2 6 6	4,879	156 13 0
	Foreign	....	....	.....	....	....	..	....	.....	..	..	....	..	..	..	.....	.....	....	....	....	....	.....	.....	.....	.....
	Private	14	256	.....	....	....	40	178	.....	..	..	....	..	..	..	150	.....	....	....	....	....	677,925	.....	.....	.....
	Total	154	3,998	266 3 0	....	....	134	397	16 14 3	83	256	11 2	65	472	50	6,800	11 10	128	8 0	9,100	5 11 0	678,002	2 6 6	4,879	156 13 0
South Sylhet.	Unclassed state forests and waste lands	65	1,004	127 12 3	....	....	65	117	14 9 3	..	..	....	..	..	..	1,000	3 12	....	....	....	....	51,777	130 3 6	325	10 2 6
	Foreign	6,420	109,196	.....	....	....	159	238	.....	27	108	....	..	..	..	1,759,388	.....	7,540	....	....	....	78,050	.....	114	.....
	Private	859	15,799	.....	....	....	300	519	.....	..	..	....	..	..	..	1,573,477	.....	204	....	....	....	184,780	.....	12	.....
	Total	7,354	125,999	127 12 3	....	....	524	874	14 9 3	27	108	....	..	..	..	3,333,865	3 12	7,744	....	....	....	314,607	130 3 6	451	10 2 6
Habiganj.	Government protected forest ..	14	172	22 14 0	....	....	19	76	10 0 6	..	..	....	..	..	..	209,968	253 6	....	....	....	....	211,208	532 6 9	2,604	82 6 0
	Foreign	3,220	81,947	.....	....	....	142	213	.....	11	44	....	..	..	..	2,544,361	.....	5,584	....	....	....	77,632	.....	285	.....
	Private	....	....	.....	....	....	..	....	.....	..	..	....	..	..	..	.....	.....	....	....	....	....	23,795	.....	7,908	.....
	Total	3,234	81,219	22 14 0	....	....	161	289	10 0 6	11	44	....	..	..	..	4,644,329	253 6	5,584	....	....	....	312,736	532 6 9	10,797	82 6 0
	Grand total	14,792	325,706	416 13 3	....	....	915	1,773	41 8 0	159	636	11 2	65	472	50	9,343,369	268 12	21,829	8 0	29,100	5 11 0	1,416,205	665 0 9	16,154	249 0 0

TARA KISOR GUPTA,

Sub-Assistant Conservator of Forests, Sylhet Division.

A. S. Press (P. & R.) No. 174—376—154-8-91.

Resolution on the Assam Forest Report for 1890-91.

Extract from the Proceedings of the Chief Commissioner of Assam No. 3488, dated the 3rd September 1891.

Read—

The Report on Forest Administration in Assam during 1890-91.

RESOLUTION.

MR. GUSTAV MANN, after having held charge of the Forest Department throughout the year 1890-91, retired from the service of Government on the 1st May 1891, when he was relieved, as a temporary arrangement, by Mr. J. T. Jellicoe, who has prepared and submitted the present Annual Report.

Chapter I.—Area and boundaries.

2. The results recorded in this chapter are generally satisfactory. The area of reserved forests increased during the year from 3,473 to 3,602 square miles, while that of protected forests decreased from 932 to 916 square miles. The decrease in the case of protected forests was entirely due to a considerable area having been taken from the Parapara protected forest into the Dibru reserve. The clearing and inspection of boundary lines and repairing of boundary mounds appear to have received adequate attention on the part of the departmental officers.

Chapter II.—Surveys, Working Plans, and Plans of Operations.

3. The Chief Commissioner is glad to notice that it was found possible to carry on an important branch of the preparation of working plans (the marking of class lines) by native surveyors, instead of the work being done by the Divisional Officer himself, with the result that the cost of marking lines was reduced from Rs. 50 per square mile, at which figure it stood in the previous year, to Rs. 5-12-11 per square mile.

Chapter III.—Protection and improvement.

4. Under the head of fire protection it is observed that better results were secured in almost every division than in the preceding year. The area over which special measures were adopted during the year under report was 730,549 acres against 676,869 acres attempted in the dry season of 1890, and of this area 685,196 acres, or 93·79 per cent., were successfully protected, against 436,108 acres, or 64·43 per cent., in the previous year. These results are creditable to the officers of the department. Progress seems also to have taken place with regard to plantation work, the most noteworthy instance being an extension of 225 acres to the Charduar rubber plantation in the Darrang division. It is especially satisfactory to notice the statement made by the Officiating Conservator (paragraph 68 of the report) that the aversion of ryots to growing valuable trees on lands formerly *jhumed* has been overcome, and that a gradual development of this system can now be hoped for.

Chapter IV.—Yield and working.

5. The total outturn from Government forests of all classes decreased by 462,919 cubic feet as compared with the previous year, the decrease being due to a diminished outturn from reserved and unclassed forests, in consequence of less timber having been worked out by purchasers and by ryots to whom free grants of forest produce were made for home consumption. In the case of protected forests a small increase took place. In explanation of the increased import of timber from private forests in the Surma Valley, the Officiating Conservator (paragraph 98 of report) remarks that this result is chiefly due to the fact "that the timber traders fell back on private forests owing to the strict enforcement of the system of marking trees before felling in Government forests." The meaning of this explanation is not clearly understood.

Chapter V.—Financial results.

6. The financial results compare with those of the two previous years as follows:

Year.			Receipts.	Charges.	Surplus.	Proportion of surplus to gross revenue.
			Rs.	Rs.	Rs.	Per cent.
1890-91	...	...	3,26,793	2,83,853	42,940	13
1889-90	...	...	3,79,498	2,57,129	1,22,369	32
1888-89	...	...	3,03,882	2,09,905	93,977	31

There was thus during the year under report a considerable falling off in the receipts accompanied by an increase in the charges, with the result that the surplus was Rs. 79,429 less than that of 1889-90 and Rs. 51,037 less than the surplus of 1888-89. The causes of this result are described in paragraph 149 of the report, and the Chief Commissioner can only express his hope that their operation, so far as the falling off in revenue is concerned, or at all events the operation of some of them, may prove to be temporary. As regards *kála-asár*, Dr. Giles, who was specially deputed for the purpose, made very careful enquiries into the causes of the disease. His report, with the Deputy Surgeon General's recommendations thereon, is now under the separate consideration of the Chief Commissioner, and Mr. Ward hopes that some preventive measures will be found possible as the result of the exhaustive investigations which have been made into the matter. A considerable amount was lost owing to the rubber *mahál* in the Lakhimpur division having remained unsold, but it was decided after full consideration not to sell the *mahál* in view of the inadequacy of the bids offered, and it by no means follows that the result will not ultimately prove beneficial to the department from a financial point of view. The Chief Commissioner is not in a position to say how far the extra expenditure incurred during the year was justified by the circumstances which existed, but Mr. Ward observes that an increase took place under every head except "Communications and Buildings" and "Contingencies," and he would repeat the hope which he has expressed on previous occasions that the Conservator will watch jealously over all increases of expenditure, with a view not only to secure a surplus, but also to render that surplus as large as is possible and consistent with a proper fulfilment of the administrative necessities of the department.

By order of the Chief Commissioner of Assam,

F. C. DAUKES,

Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 47—369+57—4-9-91.

No. 139 F., dated Calcutta, the 5th February 1892.

From—SIR E. C. BUCK, KT., *Secretary to the Government of India,*

To—*The Chief Commissioner of Assam.*

I AM directed to acknowledge the receipt of your letter No. 3545 R., dated the 14th September last, forwarding the Progress Report on Forest Administration in Assam for the year 1890-91, together with your review thereof. There was some little delay in the submission of the Report, which was not received in this Department till the 22nd September, and I am in this connection to invite your attention to section 237 of the Forest Code.

2. The results of the administration of the Department during the year under review may, generally speaking, be considered satisfactory. An area of 129 square miles, including, it is understood, 20 square miles of forest already Protected, was declared Reserved Forest during the year. Proposals for the further reservation of 486 square miles of forest were under consideration at the close of the year, and 7 square miles, which have since been gazetted as Reserves, were under settlement. There was no disafforestation of areas already reserved. The areas of the various classes of forests controlled by the Department may be indicated as follows :—

CLASS OF FORESTS.	AREA IN SQUARE MILES.				Proportion of Forests to whole area of Province (45,350 square miles).
	At the commencement of the year.	Added.	Excluded.	At the close of the year.	
					Per cent.
Reserved	3,473	129	...	3,602	8
Protected	932	4	20	916	2
Unclassed	5,597	13	140	5,470	12
	10,002	146	160	9,988	22

3. The maintenance of the existing demarcation of the forests received attention, and a small amount of new work was undertaken. The total cost was R486 less than in the preceding year, and the expenditure incurred per mile of demarcated boundary was reduced by 4½ annas. The average cost per mile, *viz.* R3-9-11, appears to be high; but the Report does not distinguish between expenditure incurred on new work and on repairs.

4. The survey of the sâl-producing tracts in connection with the preparation of Working-Plans for these forests was continued during the year by a party of the Imperial Forest Survey. The area surveyed has not been recorded. The Officer in charge of Working-Plans operations was engaged in the demarcation and classification of various kinds of forests and in the opening out of compartment lines. Progress made in this direction was satisfactory, 422 square miles having been examined; but no enumeration of stock took place owing to delay in the completion of survey operations. As remarked by you, the very considerable diminution in the cost per square mile of forest, incurred on delimitating the compartments, is satisfactory.

5. Sufficient attention seems to have been given to the maintenance and extension of roads and buildings, the expenditure on which amounted to R11,538, against R19,697 in the previous year.

6. The protection of the forests was upon the whole successfully carried

out during the year. A new Regulation to replace the old Forest Law of Assam (Act VII of 1878) received the Viceroy's assent just before the close of the calendar year. This Regulation, as well as the proposals for strengthening the subordinate forest establishment which have lately been submitted by you, will doubtless prove of great advantage in the management and working of the forests.

7. Form No. 50 appended to the Report shows the number of new cases prosecuted in Court to have been 115, or a decrease of 29 per cent. on the figures for 1889-90; while the percentage of convictions obtained has fallen from 82 to 73, and now compares unfavourably with most of the provinces directly subordinate to the Government of India. In the absence of explanation these decreases must be deemed unsatisfactory, and apparently point to a diminution of efficiency on the part of the forest-protecting staff. The Government of India, I am to say, desire that this subject may be specially dealt with in the next Progress Report. The number of cases compounded under section 67 of the Forest Act was 219, being a decrease of 23 per cent. on the previous return. It is noticeable that out of 17 new cases on account of injury caused to the forests by fire, 13 were compounded. In the opinion of His Excellency in Council, the provisions of section 67 of the Act should only be applied to such cases cautiously and for very special reasons; any action which might tend to foster in the minds of an ignorant population the idea that firing of the forests, whether of set purpose or through culpable negligence, is not a serious offence or one which in the opinion of Government calls for vigorous suppression, is manifestly to be deprecated. Section 67 was enacted to meet the case of petty offences, like the illicit removal of forest-produce; but such cases as those referred to in paragraphs 50 and 51 of the Report, in which considerable damage is understood to have been caused by fire to two reserved forests, certainly do not fall within this category.

8. The protection of the forests from fire during the year under review was satisfactory. Notwithstanding that the area over which protection was attempted was increased from 1,057 to 1,141 square miles, the proportion of failures decreased from 36 per cent. to 6 per cent. The year 1889-90 was, it is true, exceptionally unfavourable for fire-protection; nevertheless the Government of India concur with you in considering that the measures taken during the year under review reflect credit upon the officers concerned. The success attained must, however, be in great part attributed to a largely increased expenditure, the reasons for which are not set forth in the Report. While the area over which protection was attempted was increased during the year by 8 per cent., the gross expenditure incurred rose by 69 per cent., *viz.* from R12,368 to R20,872, and the cost per square mile from R18 to R20. The average charge per square mile of forest actually protected was thus increased by R2, notwithstanding that the area burned in 1889-90 was exceptionally large. In inviting your attention to these figures, I am to request that this subject may be treated in greater detail in the Report for the current year.

9. There is little calling for remark respecting the question of natural reproduction, which, as regards the most important species, sâl, continues to be satisfactory. As remarked in paragraph 8 of the Government of India's review of the forest progress made during the year 1889-90, natural conditions in the Assam forests are such that reproduction depends directly upon the protection of the forests from fire, and protection of this kind has been fairly successful in the province.

10. The expenditure on plantations was slightly in excess of that incurred

in the preceding year, and amounted to R11,855. The principal work undertaken was in the Charduar rubber plantation, upon which the charges amounted to R10,089. It is understood that at the beginning of the year the plantation contained 403 acres of forest land cleared, prepared, and ready for the reception of *Ficus* plants. 225 acres were added during the year, and 453 acres being stocked with seedlings, there remains a balance of 175 acres to be planted. The number of vacancies filled up during the year represent at least 25 acres of blanks, and the Government of India desire to be informed to what extent they are accounted for by failures in last year's planting. Other operations undertaken under this head were unimportant, but the information contained in the Report regarding the efforts made to induce ryots to plant up areas formerly *jhumed*, is satisfactory. In a few Divisions the important work of forest improvement, by the removal of inferior trees and injurious climbers, received attention.

11. The outturn from the forests during the year may be indicated as follows :—

Agency by which removed.	Material removed.			
	Timber.	Fuel.	Bamboos.	Minor produce.
Reserved Forests.	Cubic feet.	Cubic feet.	No.	R
Government	26,969	...	2,854	30
Purchasers	615,592	14,036	1,265,276	2,809
Right holders	...	...	...	...
Free-grants*	69,775	437,740	83,730	20
Total	712,336	451,776	†1,351,360	2,859
Protected Forests.				
Government	...	...	...	...
Purchasers	20,717	6,120	509,443	1,867
Right-holders	...	...	...	...
Free-grants*	20,200	559,804	1,191,750	3,986
Total	40,917	565,924	‡1,701,193	5,853
Unclassed Forests.				
Government	7,229	5,460	1,965	37
Purchasers	685,985	154,603	436,979	52,485
Right-holders	...	...	...	30
Free-grants*	481,568	1,448,910	547,034	1,201
Total	1,174,782	1,608,973	§985,978	53,753
Grand total in 1890-91	1,928,035	2,626,673	‖4,038,531	62,465
" " " 1889-90	2,542,638	2,474,989	4,251,953	67,756
Increase or decrease in 1890-91	—614,603	+151,684	—213,422	—5,291

* *Value of free-grants.*

	R	Value. R
Timber	50,291	†4,110
Fuel	34,648	‡3,951
Bamboos	6,858	§4,387
Minor produce	5,207	
Total	97,004, against R1,22,803 in 1889-90	‖12,448

The total outturn from the forests, not including produce granted free to right-holders or other privileged persons, amounted to 1,536,711 cubic feet timber and fuel, besides which the forests yielded 2,216,017 bamboos, and minor produce to the value of R62,818. The free-grants included 3,017,997 cubic feet of timber and fuel, 1,822,514 bamboos and R12,095 worth of minor produce. The gross estimated value of these free-grants was R97,004, being a decrease of R25,799 on the figures of the previous year.

Of the total outturn in timber and fuel, only 39,658 cubic feet were extracted by Government agency, while 1,497,053 cubic feet were removed by purchasers, and 3,017,997 cubic feet were granted free to the people. The abstracts contained in paragraphs 85 and 86 of the Report show that the total outturn was less than that of 1889-90 by 462,919 cubic feet, the greater portion of this decrease, or 248,514 cubic feet, being due to the decrease of free-grants as estimated. While the protected forests yielded an increased outturn of 62,095 cubic feet, the timber and fuel extracted from the reserves showed a diminution of 255,197 cubic feet on the previous return, due to the disturbed condition of the Lushai country, and to an epidemic of sickness which interfered with the working of the forests. As in the previous year, more than one-half of the timber and fuel were removed from the unclassed forests.

The value of minor forest-produce removed otherwise than as free-grants decreased by R5,323 as compared with the figures for the previous year. This decrease is, however, more than accounted for by the fact that the rubber mahals of the Lakhimpur Division were withheld from sale. In connection with the rubber outturn, it would appear from paragraph 120 of the Report that the output from the Government forests is estimated only, and is based on the difference between the gross imports and exports of the province. It is noteworthy also, from the figures given in the Report, that the estimated outturn from the State forests has been steadily declining during the past four years. No explanation of this decline has been offered, and His Excellency in Council accordingly desires that particular attention may be given to this important subject with reference to what is stated in paragraph 13 of the orders of the Government of India on the Forest Administration Report for 1889-90.

12 The financial results as compared with those of the previous year were as follows:—

Year	Receipts.	Charges	Surplus	Proportion of Surplus to gross Revenue.
	R	R	R	Per cent.
1890-91	3,26,793	2,83,853	42,940	13
1889-90	3,79,498	2,57,129	1,22,369	32
Increase or decrease in 1890-91 . .	−52,705	+26,724	−79,429	−19
Average for the five years ending 1889-90 .	2,71,871	2,23,541	48,330	18

The gross receipts were R52,705 less and the charges R26,724 more than in 1889-90. The surplus obtained amounted only to R42,940, or R79,429 less than in the previous year, and was below the average surplus for the five years ending 1889-90. With regard to the diminution in the receipts, the Government of India are of opinion that the reasons adduced in paragraph 149 of the Report sufficiently explain how this arose, and share the hope expressed

in paragraph 6 of your Resolution that the disturbing causes may prove to be of a temporary nature. It is not, however, I am to say, apparent why the charges, more especially under heads I and II, shew no diminution in view of the decrease which has occurred under the corresponding heads of account on the revenue side. The Report should have justified or explained this circumstance in greater detail than has been done. The increases in the expenditure under budget heads VIII and IX were apparently unavoidable, but, while the total charges incurred under other heads may have been, for unexplained reasons, advisable or necessary, the Government of India entirely concur in the observation contained at the close of your Resolution regarding the desirability for the exercise of watchful care in the control of all forest charges in the Province.

Appendix showing discrepancies noticed in the Assam Forest Administration Report for 1890-91.

Paragraph 16 of Report.

Ninety-eight thousand seven hundred and two, instead of 89,702, acres are shown as the area excluded during the year from Unclassed State Forests and Waste Lands.

Paragraph 64 of Report.

The area of the "vacancies" in the older plantations within the Nambor Reserve, which it is said were "filled in," should have been shown in Form No. 52 in the columns "Added during the year" and "Excluded during the year," since such area having been blank became practically excluded and was again added on its being filled in.

Paragraph 66 of Report.

It is stated that no expenditure was incurred on the Makai Nursery during the year, whereas in Form No. 52, ₹69 are shown as having been expended.

Paragraph 85 of Report.

The quantity of timber in the rough yielded from the Protected Forests in 1890-91 is given as 22,693 cubic feet, instead of 22,643 cubic feet.

Paragraph 94 (Statement).

The outturn of timber from Government Forests in Cachar having been 381,718 cubic feet in 1889-90 and 219,890 cubic feet in 1890-91, the outturn from those forests in 1890-91, as compared with the outturn for 1889-90, was less by 161,828 cubic feet, and not 161,718 as shown in the statement.

Paragraph 120 of Report.

In the statement, the outturn of rubber in 1890-91 is shown as 3,097 maunds, while, according to the context three lines above, the outturn was 3,076 maunds.

Paragraph 140 of Report (Statement).

The addition of the detailed figures representing the import of rubber into Assam in 1890-91 gives a total of 1,768 maunds, and not 1,678 maunds as entered in the statement.

FORM No. 62.

(Financial Results of the year.)

The total of charges under "Formation, protection, and improvement of Forests" is ₹1,71,565, and not ₹1,71,665.

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